

# UTAH

## AIR QUALITY BOARD

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Meeting  
September 7, 2005



Department of Environmental Quality  
Division of Air Quality

Secretary



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

**Air Quality Board**  
John M. Veranth, *Chair*  
Ernest E. Wessman, *Vice-Chair*  
Nan Bunker  
Stead Burwell  
Jerry D. Grover  
James R. Horrocks  
Dianne R. Nielson  
Wayne M. Samuelson  
JoAnn B. Seghini  
Marcelle Shoop  
Don Sorensen  
Richard W. Sprott,  
*Executive Secretary*

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

DAQ-062-2005

**UTAH AIR QUALITY BOARD MEETING**

**FINAL AGENDA**

**Wednesday, September 7, 2005**  
**1:30 p.m.**

168 North 1950 West (Bldg #2) Room 101

- I. Call-to-Order.
- II. Date of the Next Air Quality Board Meeting: October 5, 2005, November 2, 2005.
- III. Approval of the Minutes of July 6, 2005, and August 3, 2005, Board Meetings.
- IV. Resolution of IPP#3 Permit Petition by IPSC. Presented by: Christian Stephens.
- V. Propose for Public Comment: Amend R307-170, Continuous Emission Monitoring Program. Presented by: Bryce Bird.
- VI. Final Adoption: R307-101-2, Update Definition of Clearing Index. Presented by: Tyler Cruickshank.
- VII. Five-Year Reviews: R307-103, R307-110, R307- 165, R307-201, R307-205, R307-206, R307-302, R307-305, R307-307, R307-309, and R307-310. Presented by: Mat Carlile.
- VIII. Informational Items.
  - A. Decision of the Court of Appeals. Presented by: Fred Nelson.
  - B. PM Standard Modification Update. Presented by: Mat Carlile.
  - C. NSR Reform Rule Update. Presented by: Colleen Delaney.
  - D. Compliance. Presented by: Jeff Dean.
  - E. HAPS. Presented by: Bob Ford.
  - F. Monitoring. Presented by: Bob Dalley.

In compliance with the American with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Charlene Lamph, Office of Human Resources at (801) 536-4413 (TDD 536-4414).



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Environmental Quality

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DAQ-062-2005

UTAH AIR QUALITY BOARD MEETING

DRAFT AGENDA

Wednesday, September 7, 2005  
1:30 p.m.

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- I. Call-to-Order.
- II. Date of the Next Air Quality Board Meeting: October 5, 2005, November 2, 2005.
- III. Approval of the Minutes of July 6, 2005, and August 3, 2005, Board Meetings.
- IV. Resolution of IPP#3 Permit Petition by IPSC. <sup>Presented By:</sup> Christian Stephens.
- V. Propose for Public Comment: Amend R307-170, Continuous Emission Monitoring Program. Presented by: Norman Erickson. *Danica Bird*
- VI. Final Adoption: R307-101-2, Update Definition of Clearing Index. Presented by: Tyler Cruickshank.
- VII. Five-Year Reviews: R307-103, R307-110, R307-165, R307-201, R307-205, R307-206, R307-302, R307-305, R307-307, R307-309, and R307-310. Presented by: Mat Carlile.
- VIII. Informational Items.
  - A. Decision of the Court of Appeals. Presented by: Fred Nelson.
  - B. PM Standard Modification Update. Presented by: Mat Carlile.
  - C. NSR Reform Rule Update. Presented by: Colleen Delaney.
  - D. Compliance. Presented by: Jeff Dean.
  - E. HAPS. Presented by: Bob Ford.
  - F. Monitoring. Presented by: Bob Dalley.

# UTAH AIR QUALITY BOARD MEETING

July 6, 2005

## MINUTES

### I. Call to Order.

John Veranth called the meeting to order at 1:05 p.m.

Board members present:

Nan Bunker  
Jerry Grover  
Jim Horrocks

Dianne Nielson  
Wayne Samuelson  
JoAnn Seghini

Marcelle Shoop  
John Veranth  
Ernest Wessman

Acting for Executive Secretary: Cheryl Heying

### II. Next Meeting.

August 3, 2005, and September 7, 2005.

### III. Minutes.

There was one correction in the court reporter minutes located on page 48, line 22. The word "coal" in the phrase "coal technology mean," should be changed to "control."

- Jim Horrocks moved to approve the minutes, Nan Bunker seconded, and the Board approved unanimously.

### IV. Election of Board Chair and Vice Chair.

- Jim Horrocks moved to nominate John Veranth as Board Chairman, and Wayne Samuelson seconded. Motion to close nominations by Nan Bunker and seconded by Wayne Samuelson. The Board approved the nomination unanimously.
- Jim Horrocks moved to nominate Ernest Wessman as Board Vice Chairman, and Wayne Samuelson seconded. Motion to close nominations by Nan Bunker and seconded by Marcelle Shoop. The Board approved the nomination unanimously.

**Note: The agenda items were presented out of order, but for the minutes, they will be presented in order.**

V. **Propose For Final Adoption: R307-110-10 and State Implementation Plan IX.A.10, 11, and 12, PM<sub>10</sub> Maintenance Plans for Salt Lake County, Utah County, and Ogden City; and R307-110-17 and State Implementation Plan IX.H, Emission Limits and Operating Practices.** Presented by: Bill Reiss.

Mr. Reiss stated that in March the Board approved the proposed PM<sub>10</sub> Maintenance Plan for public comment. Comments were received, reviewed, and used to refine the proposal. Time would expire on this proposal if it were not voted on today.

This plan will pick up where the existing PM<sub>10</sub> State Implementation Plan (SIP) left off. The SIP brought the state into compliance with the PM<sub>10</sub> standards in 1994, and the plan will demonstrate another ten years of continued maintenance.

The structured maintenance plan will allow staff to request that EPA change the area designations to attainment. The SIP document in Part A addresses an overview of monitored attainment, why it was attained, modeled demonstration of maintenance, conformity budgets, and contingency measures.

Part H discusses emission limits for all large sources within Utah and Salt Lake Counties, as well as any large sources specifically included in the existing PM<sub>10</sub> SIP.

Mr. Reiss reviewed the various sections. Generally there were no new restrictions that appear in the proposed conditions. There would be limits on the most significant source components only.

Document Organization: EPA thought it would be in the best interest to separate the plan into three attainment areas, and that is reflected in the final proposal before the Board.

Monitored Air Quality Data: Several people sent in comments which took issue with the approach that staff looked only at data that had not been flagged as unusual. Staff stands by the basic approach and has included ample discussion of the data that had been excluded. Staff feels that flagged data is not representative of the air quality in the maintenance areas.

Contingency Measures: The proposed Part H is substantially different from what is presently included for sources in Salt Lake and Davis Counties. As part of the development of this plan, Department of Air Quality (DAQ) is re-defining recommended Reasonable Available Control Techniques (RACT) to focus on those emission components that have a significant impact on PM<sub>10</sub> concentrations. The modeling analysis that was done in support of the plan shows quantitatively that this is adequate to maintain the PM<sub>10</sub> standard.

Motor Vehicle Emissions Budget (MVEB) /Conformity: The plan includes mobile source emission budgets to be used in subsequent conformity demonstrations.

General Provisions of Part H: Mr. Reiss discussed opacity, fugitive dust, and stack testing.

Staff recommends that the Board adopt the PM<sub>10</sub> Maintenance Plan as revised for Salt Lake County, Utah County and Ogden City.

Board members asked questions about the diesel I/M Program, baseline dates, safety margin, and banked emissions. Mr. Reiss responded to all questions and the Board made no changes in the Plans. There was a correction in Section Part H, page 18, line 42, which should be amended from "R307-201-1 (7)," to read "R307-305-3 (4)."

- Jim Horrocks moved to approve the State Implementation Plan for subsection IX.A.10 for Salt Lake County, IX.A.11 for Utah County, and IXA.12 for Ogden City. Ernie Wessman seconded and the Board approved unanimously.
- Jim Horrocks moved to approve R307-110-10 incorporating the PM<sub>10</sub> SIP section IX.A.1-9, Ernie Wessman seconded and the Board approved unanimously.
- Jim Horrocks moved to approve the State Implementation Plan IX.H, Emission Limits for Salt Lake County and Utah County with revision on page 18, line 42. It should be changed from: "R307-201-1 (7)" to "R307-305-3 (4)." Ernie Wessman seconded and the Board approved unanimously.
- Jim Horrocks moved to approve R307-100-17 to incorporate emission limits in IX.H. Ernie Wessman seconded and the Board approved unanimously.

**VI. Propose For Final Adoption: Amend R307-101-2, R307-165, R307-201, R307-204, R307-205, R307-206, R307-302, R307-305, R307-309, and R307-310; New Rules R307-207 and R307-306. Presented by: Mat Carlile and Colleen Delaney.**

Mr. Carlile stated that on March 9, 2005, the Board proposed for comment amendments to R307-101-2, R307-165, R307-201, R307-204, R307-205, R307-206, R307-302, R307-305, R307-309, and R307-310. In addition, the Board proposed new rules R307-207 and R307-306. These rules were proposed for comment for the following reasons: First, many of the requirements in the current rules apply only to PM<sub>10</sub> nonattainment areas. Also, amendments were needed to ensure that the requirements continue to apply in PM<sub>10</sub> maintenance areas. Next, the rules were clarified by removing outdated requirements, and by making the requirements easier to find and understand. Finally, amendments were also proposed to separate the rules into two categories, attainment area rules, and rules that apply only in nonattainment and maintenance areas. Three public hearings were held, and comments were received on the proposals. The summary of comments and DAQ responses are attached with the PM<sub>10</sub> maintenance plan.

During the March Board meeting, Dr. Dianne Neilson asked staff to check on diesel locomotive emissions limits above 6000 feet. After researching the issue and talking with the railroads and EPA, staff has added clarifying language that locomotives are exempt from emissions limits found in R307-201-3 (5) and R307-305-3 (3). Staff will continue to work with the railroad to reduce emissions.

Marcelle Shoop asked follow-up questions relating to locomotive emission exemption. Mr. Carlile responded to these questions.

The excess emissions provision in R307-305 was erroneously left out when there was a separation of the rules into two categories, attainment area rules, and rules that apply only in nonattainment and maintenance areas. Staff proposed to correct the error.

Ms. Shoop asked additional questions about excess emissions provisions and R307-201 and R307-305. After discussion, staff was instructed to go back to the original language in the excess emissions provisions of R307-201-3 (7) and to adopt the same language in R307-305-3 (4). Ms. Shoop raised concerns about the proposed change in wind speed found in R307-309-5 (2). After discussion, staff was instructed to revert this provision back from 30 miles to 25 miles per hour.

- Jerry Grover moved to approve for final adoption, R307-101-2, R307-165, R307-204-3, R307-205, R307-206, R307-207, R307-302, R307-306, and R307-310. Ernie Wessman seconded and the Board approved unanimously.
- Jerry Grover moved to adopt R307-201, except for section R307-201-3 (7) to revert back to the original language. Ernie Wessman seconded and the Board approved unanimously.
- Jerry Grover moved to adopt R307-305 as proposed, except section R307-305-3 (4) to be identical to the existing language of R307-201-3 (7). Jim Horrocks seconded and the Board approved unanimously.
- Jerry Grover moved to approve R307-309, except for section R307-309-5 (2) to change the proposed wind speed from 30 miles per hour back to 25 miles per hour. Nan Bunker seconded and the Board approved unanimously.

**VII. Propose For Final Adoption: New Rule R307-421, PM<sub>10</sub> Offset Requirements in Salt Lake County and Utah County; and Modification to R307-101-2, Definition of "Baseline Date."** Presented by: Colleen Delaney.

Ms. Delaney indicated that on March 9, 2005, the Board proposed for comment a new rule, R307-421, PM<sub>10</sub> Offset Requirements in Salt Lake County and Utah County. This rule would maintain the PM<sub>10</sub> nonattainment area offset requirements for sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) when the areas are redesignated to attainment for PM<sub>10</sub>. The offset requirements will work in conjunction with the Prevention of Significant Deterioration (PSD) permitting program to ensure on-going attainment of the PM<sub>10</sub> standard because the emission offsets will address the secondary formation of PM<sub>10</sub> from SO<sub>2</sub> and NO<sub>x</sub>.

The Board also proposed a change to the definition of "Baseline Date" in R307-101-2 to be the date that EPA approves the PM<sub>10</sub> Maintenance Plan, and the SO<sub>2</sub> Maintenance Plan for the affected areas. This change is necessary to meet the goals of the PSD program, and to ensure that the PSD increment analysis is meaningful.

Staff recommends the adoption of R307-421 and R307-101-2, with the correction of the date of adoption of the PM<sub>10</sub> Maintenance Plan from June 1, 2005, to July 6, 2005.

NOTE: The following italicized section was added at the request of Marcelle Shoop per August 5, 2005 minutes.

*Commissioner Grover and Ms. Shoop asked for a clarification of how the banked emissions in the PM<sub>10</sub> maintenance plan would affect the permitting program. Ms. Delaney explained that the banked emissions would be available for use as offsets under the new rule, R307-421. These banked emissions would not have any meaning under the PSD permitting program, however, because the PSD program is not looking back at the*

SIP demonstration to determine compliance with the NAAQS. Instead, the PSD program evaluates the affect of a new source based on current ambient measurements. Ms. Delaney gave an example of a new 500 ton SO<sub>2</sub> source that would be located in Salt Lake County. Under the new rule R307-421, that source would be required to obtain SO<sub>2</sub> offsets to address the secondary formation of PM<sub>10</sub> in the Salt Lake County maintenance area. The offsets could be obtained from banked emissions. That same source would also be evaluated under the PSD program for impact on the SO<sub>2</sub> NAAQS. The emissions from the new source would be modeled using current ambient SO<sub>2</sub> levels as the background to see if the source would cause a violation of the SO<sub>2</sub> NAAQS. Banked emissions would not be a part of this modeling. The SO<sub>2</sub> increment consumption would also be evaluated. The source would not be evaluated under the PSD program for PM<sub>10</sub> because precursors are not currently addressed in the PSD program.

Ms. Shoop asked for a more detailed explanation for why the staff was recommending changing the definition of baseline date. Ms. Delaney explained that a major baseline date of January 5, 1975 corresponded to the date of the first PSD program. EPA wanted to give credit to sources that reduced emissions after this date, even though the minor source baseline date had not been triggered. In 1975 four counties along the Wasatch Front were nonattainment for TSP and Salt Lake County was nonattainment for SO<sub>2</sub>. If 1975 is considered the major source baseline date in these areas, then all of the emission reductions that occurred to bring these areas into attainment for the TSP and SO<sub>2</sub> NAAQS (and the subsequent PM<sub>10</sub> NAAQS) would essentially expand the increment to a level that exceeds the NAAQS. This would make an increment analysis meaningless because a new source would cause a violation of the NAAQS well before the source approached the baseline level, much less the increment of degradation that is allowed beyond that baseline level. The CAA does not address the transition of nonattainment areas to the PSD program, and it is contrary to the overall purpose of PSD to expand increment while the area is nonattainment. By making the major source baseline date the date that the area is redesignated to attainment, the PSD increment becomes meaningful, and allows growth in emissions in the area, without completely eroding the gains that have been made due to the TSP, SO<sub>2</sub> and PM<sub>10</sub> SIPs. The PSD program focuses on keeping clean areas clean. EPA's comments on this rule change asked for further justification of how this would be permitted under the language of the CAA. UDAQ will continue to discuss this with EPA.

- Dianne Nielson moved to approve the adoption of new rule R307-421, and modify R307-101-2 "Baseline Date" to July 6, 2005. JoAnn Seghini seconded and the Board approved unanimously.

#### **VIII. Scheduling of Discovery Matters for NEVCO Appeal and Determination of Role of Amici Curiae. Presented by: Fred Nelson.**

Mr. Nelson reported that the parties had met and agreed upon a schedule to handle the hearing in this matter. The discovery process will occur up through the first part of October 2005. There will be a certain time frame to file motions. The Board will hear any motions in November 2005, and set a hearing date at that time. All parties will follow R307-103. Mr. Nelson discussed the role of the amicus parties that they would be allowed to submit briefs on any dispositive motions and pre-hearing and post-hearing briefs. They would also participate in oral arguments on those matters. The amicus parties will not be allowed to do discovery, but will be allowed to attend depositions.







Ernie Wessman recused himself from this item.

- JoAnn Seghini moved that the Board accept the schedule and description of the amicus status. Nan Bunker seconded and the Board approved unanimously.

**IX. Propose For Final Adoption: R307-101-2, Update Definition of Volatile Organic Compounds.** Presented by: Jan Miller.

Ms. Miller reported that the update went out for public comment and was followed by a public hearing. No one attended the hearing, and no comments were received. Staff recommends the proposal be adopted.

- Ernie Wessman moved to approve R307-101-2, Update Definition of Volatile Organic Compounds. Jerry Grover seconded and the Board approved unanimously.

**X. Propose To Approve Five-Year Reviews and Continuation of Rules:** Presented by Jan Miller.

**A. R307-115, General Conformity.**

**B. R307-320, Davis, Salt Lake and Utah Counties, and Ogden City: Employer-Based Trip Reduction Program.**

Ms. Miller reported to the Board that Title 40, Part 93, Subpart B, of the Code of Federal Regulations, requires that states set up procedures for federal agencies to follow to determine that projects do not interfere with SIP plans. Subpart B meets that requirement and has been approved by EPA. There have been no amendments to Subpart B and no need to change R307-115.

- Jim Horrocks moved to approve R307-115, General Conformity and Marcelle Shoop seconded and the Board approved unanimously.

Ms. Miller explained that rule R307-320 is part of the Ozone Maintenance Plan. The state statute allows the Board to apply the rule to federal, state and local government agencies, including school districts. It can also be applied to private business, but that has never been done. There are about 80 agencies that are affected by this rule. The Bureau of Reclamation has the lowest drive-alone rate at 35%. This program began in 1994 with UTA doing most of the promotional work. DAQ collects statistics once each year.

- Jerry Grover moved to approve the Five-Year Reviews and Continuation of Rules B. R307-320, for Davis County, Salt Lake County, Utah County, and Ogden City: Employer-Based Trip Reduction Program. Wayne Samuelson seconded and the Board approved unanimously.

Cheryl Heying presented the advertisements that Environmental Quality has placed in the Deseret News and Salt Lake Tribune regarding the Choose Clean Air Campaign.

**XI. Propose to Approve to Modify the Equipment Requirement in Approval Order DAQE#862-01 or Kennecott Copperton Concentrator Site.** Presented by: Nando Meli.

Mr. Meli reported that Kennecott had requested approval to add two pebble-crushing units and related material handling equipment to the site. This would increase the process efficiency. The stack testing requirements had been removed and these modifications would actually decrease emissions. Before any modifications can be made, the Board must give approval. The concentrator has been removed as a SIP source in the new proposed SIP. The staff recommends these changes for Kennecott Copperton Concentrator.

Marcelle Shoop recused herself from this item.

- Ernie Wessman moved to approve the modified equipment requirement in Approval Order DAQE#862-01 to reflect the current conditions. Wayne Samuelson seconded and the Board approved unanimously.

**XII. Propose to Modify the Requirements in Approval Order DAQE#664-99 for Kennecott Tailings Impoundment Area to Reflect Current Condition.** Presented by: Nando Meli.

Mr. Meli reported that all modifications that are listed in the SIP are required to have previous Board approval. Kennecott has requested the approval to update the Approval Order (AO) to address only active impoundment areas, propose language referencing the fugitive dust abatement plan, and lower emission estimates. These modifications will decrease the tailings impoundment PM<sub>10</sub> emissions, will be consistent with the AO, and not conflict with any proposed SIP conditions.

Marcelle Shoop recused herself from this item.

- Ernie Wessman moved to approve, Nan Bunker seconded and the Board approved unanimously.

**XIII. Informational Items.**

- A. **Compliance.** No comments
- B. **HAPS.** No Comments
- C. **Monitoring.** Presented by: Bob Dalley

Mr. Dalley discussed the highest PM<sub>10</sub> and PM<sub>2.5</sub> for May and June, and they were below the standard. The highest values recorded were during some high wind-day events. A graph was handed out showing the high hourly PM<sub>10</sub> and PM<sub>2.5</sub> values during the fireworks at Ogden and Lindon. There was also a graph showing the highest ozone values in May and June. The highest ozone days occurred when there was smoke from fires in southern Utah and southern Nevada.

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Meeting adjourned at 4:30 pm.







# UTAH AIR QUALITY BOARD MEETING

August 3, 2005

## MINUTES

### I. Call to Order.

John Veranth called the meeting to order at 1:35 p.m.

Board members present:

|                                 |                 |                |
|---------------------------------|-----------------|----------------|
| Nan Bunker                      | Dianne Nielson  | Don Sorensen   |
| Jerry Grover                    | Wayne Samuelson | John Veranth   |
| Jim Horrocks                    | JoAnn Seghini   | Ernest Wessman |
| Marcelle Shoop - teleconference |                 |                |

Executive Secretary: Richard Sprott

### II. Next Meeting.

September 7, 2005, October 5, and November 2, 2005.

### III. Minutes.

Marcelle Shoop requested that approval of the minutes be held until additional points concerning the baseline date and why that date was chosen, as well as clarification if banked emission credits could be utilized in the state offset program could be added.

Rick Sprott suggested that staff work with the presenter, Colleen Delaney, and use the available notes to develop an expanded narrative that accurately reflected the discussion to Marcelle's satisfaction. Staff has emailed Marcelle additional text minutes on August 9, 2005. Since this is Marcelle's last Board meeting, Marcelle will email to John Veranth and Rick Sprott indicating that this accurately reflects her recollection of the conversation. The minutes will be presented to the Board for final adoption at the next Board meeting.

- Ernest Wessman moved that the approval of the minutes be delayed until they can be revised. JoAnn Seghini seconded and the Board approved unanimously.

### IV. Propose for Public Comment: R307-214-2, Incorporation by Reference, Various Subparts of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPS), MACT Standards. Presented by: Tim Andrus.

Mr. Andrus reviewed that EPA had promulgated two hazardous air pollutants standards, also known as MACT standards, since this rule was last updated.

Specifically, the standards for plywood and composite wood products and the standard for industrial, commercial and institutional boilers and process heaters have been issued.



The Division has committed to adopting all applicable MACT standards as they were promulgated. By adopting and receiving delegation for these standards, the State will have primacy for these rules. Staff recommends that these two MACT standards be proposed for incorporation by reference into the rules.

John Veranth pointed out that the citation on page 2 of the memo for #81 did not match the proposed rule [ (89) ] (91) on page 6. Upon verification, the proposed rule was correct and staff would confirm the citation before publication. Also, on page 2 of the memo, "(81) Subpart FFFF" should be changed to read "Subpart DDDD."

- Jerry Grover moved that the publication go out for public comment. Nan Bunker seconded and the Board approved unanimously.

**IV. Propose for Public Comment: Amend R307-840, Lead-Based Paint Accreditation, Certification and Work Practice Standards.** Presented by: Bob Ford.

Mr. Ford briefly explained the two proposals. The first proposal is an education rule which requires contractors who disturb paint as part of renovation projects that pre-date 1978 structures to inform owner and/or tenants of the possibility that lead-based paint is present. This alerts the owners and tenants of the potential of lead health effects in remodeling activities.

The second provides guidance to certified lead-based paint contractors, firms and accredited lead-based paint training providers on how to notify the division of regulated abatement projects or certification training courses. The purpose of this rule is to clarify the notification process.

On May 26, there was an outreach meeting and staff received no adverse comments for the proposed rules. Staff has also provided a copy to the EPA and the initial review finds that the changes are equally protective to human health and the environment.

- JoAnn Seghini moved that the Board propose for public comment the two proposed additions for R307-840. Wayne Samuelson seconded and the Board approved unanimously.

**VI. Ethics Discussion and Disclosure Statement.** Presented by: Fred Nelson.

Mr. Nelson, from the Attorney General's office, reviewed with the Board the State Ethics Act. The Legislature determined that even though Board members were not full-time employees of the state, the State Ethics Act would still apply to them. Many of the Board members represent specific interests and that at times presents issues of conflict of interest. There are general actions where rule making and policy decisions would apply across the state. It has been determined that there would not be a conflict of interest in that instance. If a particular entity or client that a Board member works with brings an item to the Board, the Board member is required to be recused and not participate in the decision. One primary purpose of the Ethics Act is disclosure. For the most part, if the Board member makes the disclosure on the appropriate forms and/or makes a disclosure in the meeting, the Board member can continue to participate in the meeting. There are certain prohibitions under the Ethics Act such as Board members are obligated not to disclose any kind of confidential information that is received. There are prohibitions in

accepting money for taking actions as a Board member. The completed Disclosure Statement should be notarized. It is requested that all members sign a current copy.

In addition, Mr. Veranth asked Mr. Nelson for an update on the Sierra Club's appeals of the Board's recent standing decisions. Mr. Nelson reported to the Board that the Sierra Club had filed petitions to review the decisions of the Board on the standing issue. Those appeals are now pending. The Sierra Club has also filed a motion to stay in the Sevier Power Company matter. The Sierra Club has also asked that the record be supplemented with some of the Division of Air Quality documents. As part of the Court of Appeals process, the Mediation Office selects cases where participants meet to possibly settle the case. This case was selected for mediation last week and after several hours the effort was unsuccessful. Copies of the pleadings on the supplementation of the record will be sent to the Board. The Sierra Club has asked the Court to consider as part of the record a number of documents that were filed with the permit application. They were not documents that the Board reviewed in making its decision. Mr. Nelson filed a response with the Court to advise the Court that the Board's decision was based on certain documents, and the additional documents were not part of the record at this point. If the parties wanted to bring the new documents to the Board and present them, the Board could review the decision. It is rare in the Appeals Court that they will allow supplementing the record, but the Sierra Club has made a request in that regard. As major events happen, Mr. Nelson will provide a memo in the Board packet and keep the Board advised.

## **VII. Informational Items.**

- A. Compliance.** No questions.
- B. HAPS.** No Questions.
- C. Monitoring.** Presented by: Bob Dalley.

Mr. Dalley reviewed the graphs in the packet and noted high-wind and smoky days. There were fourteen days that exceeded the health standard in July. Mr. Dalley also briefed the Board on the Ozone Projections for 2005.

- D. Tune Out Smog.** Presented by: Rick Sprott.

Mr. Sprott informed the Board about the Choose Clear Air Vehicle Care Workshop would be held on September 10 at the Salt Lake Community Campus, Sandy Campus, and the Miller Automotive Training Center from 9:30-11 a.m. This will help individuals learn about some basics in vehicle maintenance.

Marcelle Shoop expressed her appreciation for being a Board member. She has taken another job and will no longer be able to participate.

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Meeting adjourned at 2:05 p.m.



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MINUTES

R307-110 was last reviewed on March 27, 2002. The only written comments since then have addressed proposed additions and changes in the plans that are incorporated by reference by R307-110; all of these comments were reviewed and discussed by the Air Quality Board at the time of the amendments. R307-110 has been amended 12 times since the last review; no comments were received on DAR #26946, published on March 1, 2004, and effective on June 8, 2004; DAR #27296, published on August 1, 2004, and effective on October 7, 2004; and DAR #27344, published on September 1, 2004, and effective on November 4, 2004. Comments were received on the other amendments, and are summarized below. These amendments were DAR #26616, addition of the Regional Haze SIP, published on October 1, 2003, and effective on December 31, 2003; DAR #26896, Provo Maintenance Plan for Carbon Monoxide, published February 1, 2004, and effective May 18, 2004; DAR #26898-9, revisions to the Vehicle Inspection and Maintenance Plans, General Provisions and Utah County, published February 1, 2004, and effective on May 18, 2004; DAR #27295, update of the Salt Lake City Carbon Monoxide Maintenance Plan, published August 1, 2004, and effective on December 2, 2004; DAR #27343, update of the Ogden Carbon Monoxide Maintenance Plan, published September 1, 2004, and effective on January 4, 2005; DAR #27429, Sulfur Dioxide Maintenance Plan, published October 1, 2004, and effective on March 4, 2005; and DAR 27768-9, PM10 Maintenance Plans for Salt Lake County, Utah County, and Ogden, and revised Emission Limits SIP for Salt Lake and Utah Counties. DAR #26616, ADD REGIONAL HAZE SIP AND APPENDICES, ORGANIZED BY ISSUE. GENERAL COMMENTS. COMMENT: I am writing to express my strong support for the adoption and implementation of the strongest possible Utah state plan for regional haze in all five national parks in Utah. I have witnessed haze in many parks around the nation, from the Grand Canyon to Great Smoky Mountains. I want Utah's parks to remain clean, healthy, and pristine. These parks attract tourist and this tourism is crucial to Utah's current and future economy. (Richard Spotts, St. George) RESPONSE: Noted. COMMENT: Utah's proposed plan appears to address all the major components required for inclusion in SIPs as specified in Utah's regional haze rule. (Stephen P. Martin, Intermountain Region, National Park Service) RESPONSE: Noted. CLEAN AIR CORRIDORS. COMMENT: We agree with the Department's characterization of the clean air corridor requirements. Although it is unlikely that the emissions increase threshold will be triggered, we urge the State to consider that emission increases may not necessarily influence all Class I areas on the Colorado Plateau on the least-impaired days. Efforts should be taken to further refine the underlying meteorology and modeling for demonstrating impacts on the least impaired days. (William K. Lawson, PacifiCorp) RESPONSE: The State agrees that analysis of impact should address each Class I area individually, and that refinements are needed in meteorological and monitoring data for demonstrating impacts of emissions coming from the clean air corridor. WRAP's periodic "Causes of Haze" reports will provide more robust understanding of clean air corridors in the future. STATIONARY SOURCES: MILESTONES AND BACKSTOP TRADING PROGRAM. COMMENT: In the section on the milestones there is one minor error. It says that compliance will be based on a three-year average of emissions. That is correct except for the first two years as shown in the table later on in the document. (Wayne Leipold, Phelps Dodge) RESPONSE: The language in Part D is an executive summary of the stationary source program, and all of the details are addressed in Part E. There is language further on in Part D that explains how the averaging will work, and the years 2003, 2004 and 2018 are addressed in that section. COMMENT: As the result of the uncertainty created by the US Court of Appeals decision on the "American Corn Growers Association" challenge to the regional haze rule, it would be premature for the State of Utah to take any administrative action by choosing either 40CFR 51.309 or 40CFR 51.308 as an option to address regional haze. (Terry Ross, Center for Energy and Economic Development) RESPONSE: EPA's approval of the Annex on June 5, 2003 addressed the impact of the May 24, 2002 American Corn Growers Decision (Federal

Register, Vol. 68, No. 108, pages 33766 – 33767). The approval notice states, "The American Corn Growers court decision did not address the provisions in the regional haze rule allowing States to adopt a trading program or other alternative measures in place of source specific measures for BART sources." The State of Utah has developed a SIP under section 309 of the RH rule based on years of work with the GCVTC and WRAP that identified the best approach to address regional haze on the Colorado Plateau. The approach is flexible, and addresses all of the significant sources of haze in the west. The American Corn Growers decision does not change these underlying reasons for implementing the regional approach allowed under section 309 of the RH rule. COMMENT: The effect of the American Corn Growers decision is that EPA will need to revise the BART provisions, and this could have a ripple effect throughout the entire rule. The State of Utah should revise its SIP proposal to notify the public of the decision and assess the impact of that decision. (Terry Ross, Center for Energy and Economic Development) RESPONSE: As noted above, EPA addressed the impact of the American Corn Growers decision in the FR action that approved the Annex. The June 5, 2003 approval of the Annex established the requirements that a state must meet to submit a SIP under section 309 of the RH rule, and Utah is developing this SIP in accordance with that final rule. COMMENT: It has not been shown that the Annex will achieve a humanly perceptible improvement in visibility impairment. All of the other provisions (e.g. fire, mobile sources, pollution prevention, etc.) are illusory. (Terry Ross, Center for Energy and Economic Development) RESPONSE: EPA's approval of the Annex on June 5, 2003 states, "The EPA continues to believe that the milestones provide for 'greater reasonable progress than BART' and for 'steady and continuing progress.'" (FR Vol. 68, No. 108, page 33769) The GCVTC strategies that are the basis for Utah's proposed SIP are focused on achievable emission reductions from all of the emission sources that contribute to regional haze. 40 CFR 51.309(a) states, "If a transport region State submits an implementation plan which is approved by EPA as meeting the requirements of this section, it will be deemed to comply with the requirements for reasonable progress for the period from approval of the plan to 2018." COMMENT: The economic analysis for the Annex is not adequate. This analysis shows a disproportionate cost impact on downwind states such as Wyoming, Colorado and New Mexico. (Terry Ross, Center for Energy and Economic Development) RESPONSE: The economic analysis for the Annex supported the earlier GCVTC conclusions that an incentive-based market trading program is more cost-effective than a traditional command-and-control approach. An incentive-based program allows sources in all of the states to find the most cost-effective strategies to reduce SO<sub>2</sub> emissions that affect regional haze on the Colorado Plateau as well as other Class I areas that were not addressed by the Annex. COMMENT: The Annex was based on unrealistic cost assumptions for natural gas that creates a bias against coal. The Annex will create a disincentive for constructing new coal-fired power plants. (Terry Ross, Center for Energy and Economic Development) RESPONSE: The Annex was negotiated using the best information available at that time. However, the Market Trading Forum included uncertainty factors in the analysis to address changes in the underlying assumptions. More importantly, a regional emission cap allows flexibility to adapt to changing circumstances while still achieving the same or better environmental goals. If natural gas prices remain high, the cap will create an incentive to overcontrol existing sources to make room under the cap for new, highly-controlled coal-fired power plants. COMMENT: Regional haze strategies should be coordinated with the multi-pollutant legislation that is being debated by Congress. (Terry Ross, Center for Energy and Economic Development) RESPONSE: It is not clear when, or if, Congress will pass multi-pollutant legislation. If legislation is passed, Utah will need to review its regional haze strategy at that time to see if there are any impacts. COMMENT: I do not share WRAP's faith (for 'faith' is what it is) in the market-based 'backstop trading' program. When we hit the regional cap for visibility impairment, as we inevitably will do before many years pass, we will have to revisit this program, iteratively. (Ivan Weber, Weber Sustainability Consultants) RESPONSE: The backstop trading program is fully enforceable to

ensure that milestones are met. The program will be revisited regularly, both in comparing actual emissions against the cap annually, and in the SIP review and revisions that are due in 2008, 2013, and 2018. COMMENT: The EPA Nonroad Diesel Rule, at the minimum level of aggressiveness drafted by EPA, or 'better' is imperative to RHR goal attainment. WRAP's own comments on the Nonroad Diesel Rule asked EPA to accelerate the implementation schedule and to deny exemptions, delays and exceptions requested by companies, particularly in the equipment manufacturing sector. This is critical to the Salt Lake Valley, as you know, because of the proximate Bingham Canyon Mine, but also because of the massive amount of construction on roads that has characterized the past few years. This latter activity promises to increase, along with housing and other infrastructure construction to accompany the projected trebling or quadrupling of Wasatch Front population by 2050. (Ivan Weber, Weber Sustainability Consultants) RESPONSE: Utah supports the WRAP's comments regarding EPA's Nonroad Diesel Rule. COMMENT: Please also enter into the record consideration of the new climate change regional study, to which I referred at the hearing last week: *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change, Rocky Mountain/Great Basin*. A Report of the Rocky Mountain/Great Basin Regional Assessment Team, for the U.S. Global Change Research Program, Feb. 2003. Frederic H. Wagner, Principal Author and Editor. May be obtained from Dr. Fred Wagner, Utah State Univ. Ecology Center, Logan, UT 84322-5205, telephone (435)797-2555, email [ecol@cc.usu.edu](mailto:ecol@cc.usu.edu). The implications of this very thorough report's findings are potentially profound for this region, as you will discover. (Ivan Weber, Weber Sustainability Consultants) RESPONSE: Noted. COMMENT: Under this Plan, coal fired electric utilities in Utah are allowed to expand and emit more visibility impairing pollutants. (Nina Dougherty, Sierra Club) RESPONSE: The proposed regional haze SIP establishes a declining regional SO<sub>2</sub> cap with enforceable milestones. The cap does not limit SO<sub>2</sub> emissions in Utah, but requires the reductions to occur in the region. Modeling performed by the WRAP contractor, ICF, indicated that future electrical demand would not concentrate SO<sub>2</sub> emission increases in Utah, and that emission decreases would occur throughout the region. This SIP will be a complement to other existing programs, such as the Prevention of Significant Deterioration (PSD) permitting program, that will require new coal-fired power plants to meet stringent emission limitations and prevent significant deterioration of air quality in Utah's Class I areas. COMMENT: An assessment of the contribution of NO<sub>x</sub> emissions to visibility impairment in Utah is brushed aside for five years. (Nina Dougherty, Sierra Club) Language used by the State indicates that some determination of the need for NO<sub>x</sub>-PM strategies has already been made, perhaps giving the impression that there may be little future concern for these pollutants as regional haze contributors. The NPS would prefer based on the incompleteness of the current WRAP work on this subject, that the State stress the ongoing assessment of visibility impacts of NO<sub>x</sub> and PM and the potential control strategies to address those impacts. It would be appropriate to indicate that determinations of these impacts and strategies will be addressed in future revisions of the plan, and would better reflect the current status to state that the State cannot determine what level of control, if any, would be appropriate for NO<sub>x</sub> and PM through a stationary source milestone program. (Stephen P. Martin, Intermountain Region, National Park Service) RESPONSE: Utah's SIP reflects the requirements of 40 CFR 51.309 by committing to address NO<sub>x</sub> and PM emissions from stationary sources in the 2008 SIP revision. The GCVTC and WRAP concentrated on sulfur dioxide emission reductions because SO<sub>2</sub> was the most significant contributor to visibility impairment from stationary sources. Now that the work on SO<sub>2</sub> has been completed, the WRAP is beginning the technical and policy analysis that will be needed to make informed decisions about NO<sub>x</sub> and PM for the 2008 SIP revision. DAQ staff agree with both commenters that further work is needed to evaluate the impacts of NO<sub>x</sub> and PM emissions. Section XX.D.5 of the SIP has been revised in RESPONSE to these comments, and to incorporate the conclusions of the final NO<sub>x</sub>/PM report that was presented to the WRAP on October 15, 2003. The final report will replace the earlier draft report in the TSD for the SIP.



COMMENT: The Market Trading Forum agreed to allow an increase in emissions in Utah, presumably on the basis that there would be a reduction in emissions in other states in the agreement, and, therefore, a net reduction in regional emissions. Possible problems are: (a) only five states out of the original nine will be in the market trading program and (b) the other states are also facing proposals for new traditional coal fired power plants. Because of the new energy situation, it would seem that there needs to be a careful, continuing inventory of emissions in the different states in the region, with appropriate action, such as Provision L.2.(2) "If the state finds that the implementation plan is inadequate to ensure reasonable progress due to emissions from outside the state, Utah shall notify EPA and the other contributing state(s), and initiate efforts through a regional planning process to address the emissions in question." The best time to address new emissions is during the permitting process rather than after construction and operation of the new facilities. (Nina Dougherty, Sierra Club) RESPONSE: Because regional SO<sub>2</sub> emissions are capped, any new coal-fired power plants must "find room under the cap" for their new SO<sub>2</sub> emissions. This is the advantage of a mass-based cap as opposed to a traditional command-and-control approach that would not address the cumulative effects of new source growth. Modeling performed by the WRAP contractor, ICF, indicated that future electrical demand would not concentrate SO<sub>2</sub> emission increases in Utah or any other state, and that emission decreases would occur throughout the region. The proposed SIP will track SO<sub>2</sub> emissions in Utah and in the 5-state region on an annual basis for comparison to the regional milestone. The 5-year SIP reviews in 2008 and 2013 will provide an opportunity to review progress and assess whether the current implementation plan elements and strategies are sufficient to enable Utah to meet all established reasonable progress goals. COMMENT: A GCVTC analysis of the contribution of nitrates to visibility impairment found that nitrates were an important pollutant at Canyonlands. This would indicate that Utah should have a good reason to assess the contribution of NO<sub>x</sub> to visibility impairment. In addition, the recent WRAP report, "Stationary Source NO<sub>x</sub> and PM Emissions in the WRAP Region: An Initial Assessment of Emissions, Controls, and Air Quality Impacts," October 1, 2003, is not reassuring in supporting the idea of insignificance of nitrates in visibility impairment. The report states that "stationary source NO<sub>x</sub> emissions result in nitrates that probably cause about 2-5% of the impairment on the Colorado Plateau," with a footnote that says, "Some of the 20% haziest days, however are dominated by nitrate....During the 20 percent worst days on the Colorado Plateau, nitrate aerosols are responsible for about 6 to 18 percent of the man-made visibility impairment, although on some of these days they are responsible for as much as 40-60%". (p. I-3, I-4) The report adds that stationary sources have unique emission characteristics which may disproportionately impact visibility. There are also problems with the model--it works best in the summer months, a period when nitrate concentrations are low. It is stated that the current model produces uncertain results; more complete and accurate modeling results are needed. The report also emphasizes that "In addition to the modeling results, consideration should be given to meeting the reasonable progress goals of the regional haze rule, which generally imply a steady and continuous reduction in emissions and a prevention of degradation on the best visibility days." P. I-8 A problem with waiting five years for an assessment of the contribution of NO<sub>x</sub> and nitrates in Utah is that during that time period there will be notices of intent for new projects (just as there are right now) which would increase NO<sub>x</sub> emissions in Utah. It is better to tackle NO<sub>x</sub> reduction during the permitting stage than after construction and operation. We would hope that NO<sub>x</sub> modeling could begin when the modeling capability has improved, and that regional inventorying of operating and proposed NO<sub>x</sub> emissions is continuous. (Nina Dougherty, Sierra Club) RESPONSE: The proposed SIP commits to address the impact of stationary source NO<sub>x</sub> and PM emissions and the possible need for a regional cap to address growth in these pollutants in the 2008 SIP revision. As the commentor notes, modeling and inventory improvements are needed to better understand the impacts of these two pollutants. It is premature to draw policy conclusions regarding the impact of these pollutants from existing sources at this time. As described in the RESPONSE to

an earlier comment, the SIP has been revised to incorporate the conclusions from the final NOx/PM report. Between now and 2008, the Regional Haze SIP will complement other programs, such as the PSD permitting program, that require new sources of NOx and PM to meet stringent emission limitations and prevent significant deterioration of air quality in Utah's Class I areas. COMMENT: Reasonably Attributable Visibility Impairment (RAVI). This is a very important provision to address the geographic aspect of sources near Class I areas in the context of regional haze. We hope the RAVI procedure will be used, such as in examining the impact of NOx and other emissions from the Hunter and Huntington units on visibility in Canyonlands. (Nina Dougherty, Sierra Club) RESPONSE: Utah's current visibility SIP addresses reasonably attributable visibility impairment (RAVI). Section XX.D.4 of the SIP addresses the relationship between the existing RAVI SIP and the new regional haze SIP. This section states, "If the National Park Service certifies impairment, the State of Utah will fulfill its obligations to determine attribution and if necessary determine BART for the applicable source or group of sources in accordance with Utah's SIP for visibility protection submitted to EPA on April 26, 1985 and approved on May 30, 1986." COMMENT: The title of section XX.D.2 should be changed to reflect the specific requirement in 309. (William K. Lawson, PacifiCorp) RESPONSE: The title has been changed to: "Achievement of a 13% or Greater Reduction of Sulfur Dioxide by 2000." COMMENT: The text in XX.D.3.a should mirror the language in 40 CFR 309 that requires the milestones to achieve "greater reasonable progress than BART." (William K. Lawson, PacifiCorp) RESPONSE: The second sentence in XX.D.3.a has been changed to: "The Annex demonstrated that the 2018 regional sulfur dioxide milestone provides for greater reasonable progress than would be achieved by application of best available retrofit technology (BART), as required by 40 CFR 51.309(f)(1)(i)." COMMENT: PacifiCorp urges Utah to continue working with the federal land managers in order to refine the approach that will be used to address RAVI given that regional emissions are being reduced under the haze program. There are still a few significant policy issues that remain to be resolved (e.g., data interpretation methods revealing significant emission spikes within class I areas that would qualify them as genuine "hot spots" and identifying a portfolio of remedies if they become necessary). (William K. Lawson, PacifiCorp) RESPONSE: The State of Utah is working with the National Park Service to finalize a Memorandum of Agreement regarding the circumstances that would lead to a certification of impairment within the context of a regional haze SIP that establishes a declining SO2 emission cap. A draft MOA developed by the WRAP Market Trading Forum is included in the TSD to the RH SIP. DAQ staff agree with PacifiCorp that the resolution of any "hot spot" issues could be addressed with different remedies that achieved similar or better results. DAQ intends to work with the Federal Land Managers as new visibility data are gathered through the IMPROVE network to ensure that there are common understandings and agreements about visibility trends in the Class I areas. COMMENT: PacifiCorp recommends that the State be very cautious about adjusting the interim milestones due to changes in flow measurement techniques at electric generating utilities, and recommends that the State rely on the emissions that utilities report to EPA under the acid rain program rather than focusing on relatively minor changes in the milestones. (William K. Lawson, PacifiCorp) RESPONSE: The WRAP Market Trading Forum discussed at length the issue of "paper" emission changes due to new flow measurement techniques. There was concern that these changes would undermine the goals of the Annex because real emission reductions would not occur, even though the reported emissions would show a decrease. The SIP provisions related to flow rate measurement methods were designed to ensure that actual emission reductions take place. These measures need to remain in place so that we can determine the scope of the "paper changes" that have occurred since 1999. The measures are also specifically required by 40 CFR 51.309(h)(1)(iv). COMMENT: Revise XX.E.1.d.(2)(b) - at the end of this subsection, add the following sentence: "The draft report will be posted on the WRAP website for a period of public review and comment for not less than 30 days." (William K. Lawson, PacifiCorp) RESPONSE: The change has been made as recommended.

COMMENT: Revise XX.E.1.d.(3) to read as follows – "(3) Consensus decision: The executive secretary commits to meet with the participating states and tribes in March 2014 to discuss any comments received on the 2018 emission projections in the draft report. The participating states and tribes will decide through a consensus process, whether it can be determined that the 2018 milestone will not be met, and whether it is necessary to trigger the WEB trading program early in order to meet the SO<sub>2</sub> emission reduction goals in 2018." (William K. Lawson, PacifiCorp)

RESPONSE: The suggested language has not been added to the SIP. The purpose of the 2013 review is to determine whether we are heading into trouble so that the participating states and tribes can avoid a major non-compliance issue in 2018. If the 2018 penalty provisions are triggered, it will be a failure of the expected process, and sources in Utah would face significant financial penalties. By triggering the trading program, the states will use the backstop regulatory program to ensure that sources remain in compliance and that the goals of the program are met. The decision will be based on the best information available, but because the states and tribes will be using emission projections, there will always be some uncertainties in the numbers. It cannot be "determined that the milestones will not be met" with absolute certainty, and the proposed language could be interpreted to require certainty. The milestones are designed so that market forces and the incentive of avoiding a regulatory program will drive emission reductions rather than a regulatory program. The states and tribes will not trigger the trading program in 2013 unless this incentive process does not appear to be effective. The decision will not be made lightly. However, it is impossible to identify all of the factors that must be considered in this decision process at this point in time. COMMENT: In Table 4, correct the tonnage for the Ute Indian Tribe in years 2008-2018 from 1,129 to 1,135. Also, the second half of Table 4, for years 2011 - 2018, is missing. (Laurel Dygowski, EPA Region 8) RESPONSE: The corrections have been made. COMMENT: In E.1.c(4)(b), the reference to Table 3 should be Table 5. (Laurel Dygowski, EPA Region 8) RESPONSE: The correction has been made. COMMENT: In E.1.d.(2)(b), "2013" should be added after December 31. (Laurel Dygowski, EPA Region 8) RESPONSE: The correction has been made. COMMENT: In E.3.i(2)(b), the reference to SIP Section XX.E.5.k(1)(b) should be XX.E.3.k(1)(b). (Laurel Dygowski, EPA Region 8) RESPONSE: The correction has been made. COMMENT: In E.3.k(2), it would be helpful to add the sentence from the model SIP stating, "More details on liabilities for different provisions can be found in the provisions of [state or tribe market trading rule]." It is an informative statement that can help direct people to appropriate liability provisions. (Laurel Dygowski, EPA Region 8) RESPONSE: The sentence has been added. FIRE PROGRAMS. COMMENT: Utah Farm Bureau Federation believes the Utah State Implementation Plan for compliance with the Regional Haze rule accurately portrays the surveyed emissions from agricultural burning. In addition, the conclusion that the requirements of 40 CFR 51.309(d)(6)(i) are met through the voluntary emission reduction techniques and local government controls coincides with the empirical and anecdotal evidence Farm Bureau has observed. However, we believe the statement of agency action stated on page 64 of the SIP is attributed to a conclusion that does not bear out from the data. The SIP states: "Since agricultural burning has been documented in Section 3 to have an inordinate impact on visibility in Class I areas, the emission tracking activities will be conducted on a periodic basis...." We believe you have incorrectly stated the evidence of the data by utilizing the term "inordinate" and request you change the word to from "inordinate" to "insignificant." (Wes Quinton, Utah Farm Bureau Federation) RESPONSE: The text has been changed as follows: "Since agricultural burning has been documented in Subsection 2.b above to be a very small proportion of total emissions in Utah and a very small proportion of agricultural burning in the West, the emission tracking activities will be conducted on a periodic basis to determine if any significant changes have been made since the 2003 survey." COMMENT: Part G addresses fire emissions from federal, State, and private lands but creates disparate treatment between wildlands and agricultural lands. Utah's Enhanced Smoke Management Plan (ESMP) only applies to federal and State land managers while exempting the agricultural sector. We



regular opportunity to consider whether changes are needed in managing fire activities.

**POLLUTION PREVENTION AND RENEWABLE ENERGY. COMMENT:** The problem of regional haze is just one symptom of our larger cultural dependence on fossil fuels and inefficient internal combustion engines. We need to reduce this dependence through an aggressive new combination of new energy sources as well as much greater energy efficiencies and conservation. I hope that Utah officials will demonstrate the wisdom, foresight and courage to change the status quo for the better to move us forward. Otherwise, with the explosion in human population and development in the St. George basin and elsewhere, the problems, including regional haze, will only worsen. (Richard Spotts, St. George) **RESPONSE:** Noted. **COMMENT:** (William K. Lawson, PacifiCorp) We ask the State to include following Table 10 the following language from the Preamble to the federal regional haze rule: "The goals themselves are not enforceable and States are not required to meet the renewable energy goals...Rather, EPA is setting enforceable requirements for the States to assess progress toward goals established by the GCVTC with respect to renewable energy production as a means for reducing dependence on more polluting forms of energy production. States participating in the GCVTC strategy are responsible for explaining why they cannot meet the GCVTC goals. The required reporting by the States will inform the public of air quality improvements that would result from that goal had it been realized. It is the relationship between renewable energy production and associated environmental effects (direct and indirect) that is the thrust of the assessment and reporting effort under the SIP." (64 FR 35754-55) **RESPONSE:** This paragraph has not been added. This statement of the intent of 40 CFR 51.309(d)(8) matches our understanding but the Preamble carries the same weight whether or not it is included in the SIP and generally, we do not repeat language from the Preamble within the SIP. **COMMENT:** In Appendix I, page 24, change the line to "PacifiCorp plans to purchase contracts for over 1,000 MW of renewables (such as wind, geothermal, and/or other resources)." Also, please check on the claim that, since Utahns pay 38% of our costs, then 38% of our renewable purchases will go towards meeting Utah's share of the WRAP's 10/20 renewables goals in Section 309. (William K. Lawson, PacifiCorp) **RESPONSE:** Appendix I has been moved to the Technical Support Document, and the sentence has been changed. It is clear that the IRP is a plan that is updated annually or biennially, and therefore is subject to change in future iterations. The word "approximately" has been added before "38%" to indicate that this share varies somewhat from year to year. WRAP states have determined that renewable energy will be apportioned to each state in accordance with that state's purchase of renewables, rather than on the basis of renewables generated within the state. **COMMENT:** Appendix I, page 27: "Each block a customer agrees to purchase costs \$1.95/month." (William K. Lawson, PacifiCorp) **RESPONSE:** This change has been made. **COMMENT:** Appendix I, page 27-28: Should be "Blue Sky" rather than "Blue Skies." (William K. Lawson, PacifiCorp) **RESPONSE:** This change has been made. **COMMENT:** The SIP appears to conclude that renewables and energy efficiency do little to decrease visibility impairing pollutants. (Nina Dougherty, Sierra Club) **RESPONSE:** Renewables and energy efficiency bring on line additional electric power to meet the growing demands of the West without adding additional emissions that impair visibility. **COMMENT:** The SIP emphasizes that Utah does not have to meet within the state the goals of having 10% of its power generation come from renewables by 2005 and 20% by 2015, nor of enhancing energy efficiency programs, because according to the SIP those goals are to be achieved on a regional, not a state basis. Utah is just supposed to contribute in some way to those goals, but can proceed with increasing the percentage of coal used to generate electricity for Utah customers. (Nina Dougherty, Sierra Club) **RESPONSE:** Because regional haze spreads widely across the West, the Grand Canyon Visibility Transport Commission determined that regional programs could best meet the goal of improved visibility in Class I areas. The Commission recommended that reductions of sulfur dioxide from large stationary sources be achieved through a regional cap and a backstop regional trading program. Similarly, the Commission recommended regional renewable energy goals. This regional

approach is especially appropriate for electricity generation because the electricity to meet demand is not generated within each state, but rather is generated where it is most economical to do so. Expected increases in renewable energy production that are paid for by Utah consumers are identified in the Technical Support Documentation. Examination of the data in the Technical Support Document indicates that the proportion of energy generation for demand within Utah--as opposed to demand in other states that is supplied by electricity generation in Utah--increasingly will come from renewable sources, with the expectation that Utah will generate about 550 MW of new renewable generating sources by 2013. Those sources may well lie outside Utah's boundaries, but will be paid for by Utah consumers. The Regional Haze Rule itself is not clear in how states submitting 309 SIPs should project their expected shares of the 10/20 goals, and several different methods are available. DAQ has chosen to estimate Utah's portion of peak summer demand, and estimates that Utah will be responsible for generating approximately that much renewable energy by 2013. COMMENT: The states in the region are expected to contribute to the 10/20 regional goals, if not to achieve it. But surely, the states should do more than Utah to contribute to the regional goal. The SIP indicates that Utah has a huge untapped solar resource and impressive potential for wind generation in the state. Yet currently only 0.768% of its energy generation comes from non-hydro renewables (5.975% with Hydro). Geothermal is the main renewable used in Utah--39.8 MW in 2002--with landfill providing 1.6 MW, solar/PV 0.238 MW and wind 0.498. Even Utah's consumption of non-hydro renewable power from any source, whether in-state or out-of-state, is minimal - only 0.62%. Coal, on the other hand, was used to produce 87% of the electricity in Utah in 2002. (Nina Dougherty, Sierra Club) RESPONSE: All western states have untapped sources of renewable energy potential. When those resources will be developed depends upon market forces. A significant portion of the electricity generated in Utah serves consumers in other states. Again, the 10/20 goals are goals, and the WRAP's Air Pollution Prevention Forum recommends measuring each state's contribution toward the goals by the renewable energy purchased by consumers within the state, no matter where the electricity is generated. The Technical Support Document indicates that the renewable energy purchased by Utah consumers in the future will increase substantially, to approximately 550 MW by 2013 and Part I.4.b indicates that will meet Utah's share of the regional goal. COMMENT: The assumption regarding distributed energy is very limited--"In general, small loads located more than 3 miles from the transmission and distribution grid have the highest potential for being served cost effectively by on-site renewable power generation." PV is in fact useful and used where there is connection to the grid. (Nina Dougherty, Sierra Club) RESPONSE: It is true that photovoltaics are used where there is connection to the grid, but the highest potential for their use is for small loads located at some distance from the grid. COMMENT: Also of major concern is the assertion that increased use of renewables and energy efficiency would primarily replace generation by combined cycle natural gas in the region and would barely make a dent in generation by coal. The stated result of this is that renewable and energy efficiency programs would only result in minor reduction of NOx and that no significant visibility changes can be shown because the resolution of the regional air quality modeling system is insufficient for such marginal emission reductions. Also, WRAP modeling suggests that increased use of renewables and energy efficiency does not reduce SO2 emissions "because the regional SO2 trading program proposed under the Annex is the controlling factor in reducing SO2 emissions." (Nina Dougherty, Sierra Club) RESPONSE: Which traditional sources of energy generation will be displaced by renewables and energy efficiency increases was a prediction by the model used by ICF for the WRAP. In the SIP updates of 2008, 2013, and 2018, improved projection methods, as well as improved air quality modeling, are likely to yield a more accurate understanding of the magnitude of NOx reductions and their effect on visibility impairment. Finally, the SO2 milestones are the limiting factor for SO2 in the region. Renewable energy sources may be used to replace sources that emit SO2, but the fact that renewables are the substitute generation source will not change the amount of SO2 that is



reduced. COMMENT: The energy pollution prevention section of the SIP seems constructed to tell us that (1) Utah can continue on its minimal use of renewables and can depend on other states to do the right thing, and (2) that increased use of renewables and energy efficiency in the region will not do much to improve visibility. These are disturbing conclusions that can be rectified by (1) Utah doing more on renewables and energy efficiency, and (2) promotion of more aggressive renewable and efficiency programs in the region--and assuming that such programs will replace coal as well natural gas. (Nina Dougherty, Sierra Club) RESPONSE: Utah's demand for renewable energy will increase substantially in the next decade, according to expectations presented in the Technical Support Documentation. This SIP and its accompanying documentation is the most complete assembly to date of information and projections regarding energy generation for Utah consumers, and is being published by DAQ as a stand-alone document so that interested parties can better understand what is happening today and whether additional policy decisions are needed regarding future energy production. PROJECTION OF VISIBILITY IMPROVEMENT. COMMENT: We suggest revisions in Part K, in the paragraph following Table 22. The paragraph indicates that visibility improvements on the best days goes beyond the national visibility goal in the Clean Air Act. On the contrary, the Clean Air Act goal is in part "the remedying of existing impairment of visibility." Mesa Verde National Park should be included in the list of Class I's where visibility on the good days is expected to improve. The title of Table 23 might more appropriately be "Projected Visibility Changes..." rather than "Projected Visibility Improvement..." because half the 16 areas shown reduced visibility by 2018. (Stephen P. Martin, Intermountain Region, National Park Service) RESPONSE: The 1996 numbers are not modeled information, as the table headings indicate, but rather are averages of actual monitored data for the years 1997-2001, collected from monitoring sites within or near the 16 Class I areas. For some sites, monitored data is available for the entire period; for other sites, only a single year of data was available. Because this information is not comparable with the modeled information in the column for 2018, the column of 1996 data in Tables 22 and 23 is being removed. The 1996 column of data is not comparable to modeled values for two reasons. First, the base year for Section 309 SIPs--the year from which inventories of emissions were collected for use in the modeling--was 1996, and use of 1997-2001 monitored information contributes nothing toward an understanding of how changes in emissions affect visibility. Second, use of a single or even several years of monitored data from which to understand changes in visibility impairment is inappropriate, because of the year to year variability. Removing the 1996 column from the tables requires modifications in the accompanying text. The new text focuses on the required 309 comparisons of the modeled projections of visibility that are expected with and without the regional haze SIP. These indicate that visibility will be better on best and worst days with this SIP. WRAP is making appropriate modifications in the tables in the WRAP Technical Support Document to correct the data. ADDITIONAL CLASS I AREAS. COMMENT: The proposed plan does not include a section discussing other Class I areas, but the Executive Summary states that Utah has no additional Class I areas in RESPONSE to the federal requirement under 40 CFR 51.309(g). For purposes of the initial plan, no additional Class I areas must be addressed, but the plan should indicate that the 2008 update must address out-of-state Class I areas not on the Colorado Plateau that may be affected by the transport of emissions from Utah. (Stephen P. Martin, Intermountain Region, National Park Service) RESPONSE: 40 CFR 51.309(g) provides a mechanism to apply 309 control strategies to other Class I areas within states that submit SIPs under Section 309. Utah is the only state that is submitting a SIP under Section 309 that has no Class I areas outside the 16 Class I's on the Colorado Plateau. Other 309 States are declaring within their 309 SIPs whether they will address the additional Class I areas within their borders by implementing 309 strategies, or by following the provisions of Section 308. Utah will, of course, work with other states within the WRAP in addressing impairment in Class I areas outside Utah's borders. DAR #26896: NEW PROVO CARBON MONOXIDE MAINTENANCE PLAN. COMMENTERS. Rep. David Cox, Lehi, email. AB Fredericks,

Woodland Hills, email. Paul Jensen, Spanish Fork, email. Nellie Motes, Provo, telephone. Mrs. Paulsen, Payson, phone. Kathy Jackson, Provo, phone. Mr and Mrs Warren Johnson, Spanish Fork, letter. Viri C Long, Provo, letter. Jay Allen, American Fork, letter. Terry Fredericks, Spanish Fork, email. J.J. Bird, Springville, letter. R. Holley, Springville, letter. The above commenters favored ending the oxygenated gasoline program, and expressed similar reasons: oxyfuel causes poor vehicle performance and reduces gas mileage; oxyfuel doesn't really help the air quality; it's unfair that other areas don't have to use oxyfuel as well as Utah County; our smog blows in from Salt Lake; it doesn't help here because so many people buy gas outside Utah County; and it's harmful to human health. RESPONSE: If this Plan is adopted, use of oxygenated gasoline in Utah County will end, unless carbon monoxide levels again exceed the federal health standard. COMMENT: It seems to me that in order to make an educated decision, citizens need to be able to see what they are trading for approximately \$5 per winter. I believe that appreciable differences in air quality are worth much more than \$5/person each winter. (email, Myles Watson) RESPONSE: DAQ staff agrees. However, the difference is not appreciable. Carbon monoxide levels are approximately 4% lower with oxygenated gasoline, but that percentage is declining each year as more vehicles with advanced technology replace older vehicles. Projections for the future show that the federal health standard will be maintained without oxygenated gasoline for at least the next 10 years. The health standard is set at a level to protect public health. Thus, no health benefits are lost by ending use of oxygenated gasoline. COMMENT: ConocoPhillips is directly impacted by the current oxygenated gasoline requirements and the proposed changes. ConocoPhillips supports the State's request that EPA approve a new attainment demonstration and maintenance plan for Provo and redesignate Provo to attainment status for carbon monoxide. Removing the wintertime oxygenate requirement will give fuel suppliers additional flexibility which we all support. (letter, H. Daniel Sinks, Fuel Issues Advisor, ConocoPhillips) RESPONSE: Noted. COMMENT: Highland City wishes to express its support for the current action under consideration. With the proximity to Salt Lake County, it seems of dubious value to have a different kind of gas. As it appears that the air quality has improved it is time to make these changes. Our residents are excited about these changes and are encouraged that they may be coming sooner rather than later. (letter, Barry Edwards, City Administrator, Highland City) RESPONSE: Noted. COMMENT: Mountainland AOG is pleased with the progress of the redesignation request and Maintenance Plan and we look forward to the elimination of the oxyfuel provision for the next fall/winter season starting November 2004. We would like to thank the Division for the positive cooperation demonstrated throughout the preparation of this Plan and in particular we thank Bill Colbert for his personal helpfulness and professional coordination. (Susan Hardy, Air Quality Program Manager, Mountainland Association of Governments) RESPONSE: Noted. COMMENT: The member companies of the Utah Petroleum Association strongly support the Provo carbon monoxide plan and the deletion of the requirement for use of oxygenated gasoline in Utah County. Oxygenated fuels have served a valid purpose, but eliminating them will be a welcome relief to the petroleum industry. The inconvenience and added expense of producing and dispensing oxyfuel each winter has been a continuing concern for our industry. Our industry is proud to be a positive contributor in Utah's efforts to improve and maintain air quality. (Lee Peacock, president, Utah Petroleum Association) RESPONSE: Noted. COMMENT: I'm also glad to see the end of the annual inspection of new cars. That too was just an added expense to the public. (email comment, Paul K. Jensen, Spanish Fork) RESPONSE: Noted. EPA COMMENT: With respect to the revised version of R307-301 "Utah and Weber Counties: Oxygenated Gasoline Program as a Contingency Measure" we are unsure of the State's intention. From EPA's perspective, this specific contingency measure rule language does not have to be adopted at this time for the maintenance plan. If the State decides to have the UAQB adopt this language, this revision does not need to be submitted to EPA. (letter, Richard Long, EPA Region 8) RESPONSE: Agree. In fact, there is no longer a need for the rule to be federally-enforceable at all. The letter to EPA



requesting redesignation also will request that R307-301 be removed from the federally-enforceable SIP. EPA COMMENT: Page 2, first paragraph, third sentence under "(3) Provo Carbon Monoxide Designation History": The Federal Register citation "(67 FR 59232)" is not correct. The correct citation of the direct final rule is 67 FR 59165. RESPONSE: Agree. The change has been made. EPA COMMENT: Page 2, second paragraph, last sentence under "(3) Provo Carbon Monoxide Designation History": The sentence states "In September 2001, the oxygenate concentration was reduced to 2.7% after MOBILE6 modeling runs demonstrated that the NAAQS could be met with the lower concentration of oxygenate." This is not correct. The oxygenate requirement was allowed to be reduced from 3.1% to 2.7% only after EPA's approval on September 20, 2002 (ref. 67 FR 59165). Please note and cite our approval. RESPONSE: Revise the sentence to read as follows: "In September 2001, the oxygenate concentration under State law was reduced to 2.7% after MOBILE6 modeling runs demonstrated that the NAAQS could be met with the lower concentration of oxygenate; EPA approved the revision on September 20, 2002 (67 FR 59165)." EPA COMMENT: Page 3, first paragraph, second sentence which includes the phrase "... and a monitoring site was established ..." We suggest adding the word "also" as follows "... and a monitoring site was also established ..." RESPONSE: Revise as follows: "... and a monitoring site was also established ..." EPA COMMENT: Page 3, third paragraph, directly under Table 1; the State needs to provide a clarification of this paragraph in that particular measures and implementation time frames should be mentioned. RESPONSE: The text has been modified to include implementation dates for vehicle inspection and maintenance, oxygenated gasoline and contingency measures, as well as the designation history. EPA COMMENT: Page 3, second paragraph, second sentence under "(2) Monitoring Results and Attainment Demonstration": The "University Avenue #3 site" is mentioned as also having detected an exceedance of the CO standard. However, it is not listed on page 3 in "Table 1. Monitoring Site Locations." The State needs to explain what happened to this monitoring site. RESPONSE: The station number and address were incorrect in the draft Plan. The text and Table 1 have been corrected. EPA COMMENT: Page 5, "Table 2. 1<sup>st</sup> and 2<sup>nd</sup> High 8-hour CO Concentrations (ppm) at Utah County Monitoring Stations": The footnote to this table states "\*\* Data with more significant figures are not available." EPA disagrees; the data is in our Air Quality Subsystem (AQS). This information needs to be included in Table 2. RESPONSE: Agree; the change has been made. EPA COMMENT: Page 5, "Figure 2. 2<sup>nd</sup> High 8-hour Carbon Monoxide Concentration at the North Provo and University Avenue Monitors." Data are displayed for values up through 2001; however, data for 2002 are available and need to be displayed. Further, the State needs to provide any acceptable data that are available for 2003. This comment also applies to comment no. 6 above. Also, the key for the figure states "8-hour Running Average Standard is 9 PPM." The correct description is "8-hour non-overlapping average standard is 9 ppm." RESPONSE: Agree; the change has been made and additional data are added. EPA COMMENT: Page 6, first paragraph, first sentence under "(5) Ongoing Review of Monitoring Sites"; delete "additional." RESPONSE: Agree; the change has been made. EPA COMMENT: Page 8, "Figure 3. Provo 2000 Base-Year Episode Inventory" and "Table 4. 2000 Provo Attainment-Episode Inventory." The contribution of non-road source emissions is not identified and needs to be presented. RESPONSE: Agree; the change has been made. EPA COMMENT: Page 10, first paragraph, first full sentence which ends with "... within the modeling domain." Insert the following statement after this sentence, "Therefore, attainment of the CO NAAQS is demonstrated for the year 2000." RESPONSE: (Page 12) Agree; the sentence is amended as follows: "Therefore, attainment of the carbon monoxide standard is demonstrated for the year 2000." EPA COMMENT: Page 10, under "(i) Oxygenated Gasoline Program." It is stated that a 2.7% oxygen content by weight program was applicable to the year 2000. The oxygen content by weight that was required in the Provo area in calendar year 2000 was 3.1%. EPA granted relief from this 3.1% requirement, and the program was allowed to revert back to 2.7%, but not until our direct final rule of September 20, 2002 (67 FR 59165)

became effective November 19, 2002. The State needs to review this issue and make any necessary corrections. RESPONSE: (Page 13) Agree; the sentence is amended as follows: "...addition of a minimum of 3.1% oxygen content by weight to gasoline sold in Utah County during the control period." EPA COMMENT: Page 10, paragraph under "(ii) Gasoline Vehicle Emissions Inspection and Maintenance (I/M) Program," last sentence which states "EPA has verified that Utah County's I/M program is equivalent to a test-only program. For clarity, please add the Federal Register citation for this Agency approval which is 67 FR 5774 (September 12, 2002, effective November 12, 2002). RESPONSE: (Page 13) Agree; the change has been made. EPA COMMENT: Page 11, third paragraph, last sentence under "(B) Enhanced Inspection and Maintenance Program": For clarity and accuracy, this sentence should read as "This allowed Utah County to claim 100% emissions test-only credit for its I/M program and meet the requirements of the CAA for an enhanced program, as modified by the NHSDA. RESPONSE: (Page 14) Agree; the sentence is amended as follows: "This allowed Utah County to claim 100% emissions test-only credit for its I/M program and to meet the federal requirements, as modified by the NHSDA, for an enhanced program." EPA COMMENT: Page 11, paragraph under "(iii) Wood-burning Controls": The State should be aware that EPA never took action on the 1994 SIP revision that addressed controls for wood-burning devices. This revision was included with the 1994 SIP and was labeled as "Rule Change DAR #15736, R307-1-4.12." EPA and the State need to discuss the status of this rule prior to the UAQB's meeting in April. For the State to have a fully approved SIP for purposes of redesignation, EPA would need to be able to approve this 1994 rule revision or a replacement rule. RESPONSE: (Page 14) No action is needed at this time by DAQ or the Air Quality Board. Governor Leavitt submitted the wood-burning controls for carbon monoxide along with the Provo CO SIP on July 11, 1994. EPA could approve the wood-burning rules as requested in 1994. EPA COMMENT: Page 11, sentence under "(d) Tri-annual Emissions Inventory": For clarity, "NEI" should be spelled out (National Emissions Inventory) and the citation for EPA's Consolidated Emissions Reporting Rule (CERR) should be included (June 10, 2002, 67 FR 39602). RESPONSE: (Page 14) Agree; the change has been made. EPA COMMENT: Page 13, "Table 7. Requirements of a Maintenance Plan": This table is not correct and appears to contain provisions from several documents. The overall requirements for redesignation to attainment are stated in section 107(d)(3)(E) of the Clean Air Act (CAA). Primary redesignation and maintenance plan requirements are found in section 175A of the CAA and in EPA's redesignation policy memorandum, signed by John Calcagni and dated September 4, 1992, entitled "Procedures for Processing Requests to Redesignate Areas to Attainment" (hereafter referred to as the "Calcagni memorandum"). The State needs to review these documents and modify this table accordingly. Please include all five requirements from section 107(d)(3)(E) of the CAA and ensure that the State addresses all five requirements in the text that follows the table. The current text fails to address three of the requirements. RESPONSE: (Pages 15-17) Both Table 6 and Table 7 are revised to reflect this and the next 4 comments. EPA COMMENT: Page 13, "Table 7. Requirements of a Maintenance Plan," under the heading "Requirement" for the first item entitled "Attainment Emission Inventory": The Provo area was originally designated as nonattainment on November 6, 1991 (56 FR 56694) and was classified as "moderate" with a design value greater than 12.7 ppm. Areas with this designation were required by section 187(a)(7) the Clean Air Act (CAA) to perform a dispersion modeled attainment demonstration and, therefore, do not qualify to use an "inventory approach" to demonstrate maintenance. The Calcagni memorandum states on page 9, under "b. Maintenance Demonstration": "Under the Clean Air Act, many areas are required to submit modeled attainment demonstrations to show that proposed reductions in emissions will be sufficient to attain the applicable NAAQS. For these areas, the maintenance demonstration should be based upon the same level of modeling." The discussion regarding the "inventory approach" needs to be deleted and replaced with the modeling approach requirements as this is what has been required and prepared by the State for the Provo plan. For the attainment inventory, we agree this

would become a base year inventory for the modeling effort. RESPONSE: Agree; Tables 5 and 6 are revised. EPA COMMENT: Page 13, "Table 7. Requirements of a Maintenance Plan," under the heading "Requirement" for the second item entitled "Projected Inventories": Please refer to our comment no. 17 above and adjust this language to reflect the requirements for a modeled maintenance demonstration. Also, the reference to "CAA: section 172(c)(3)" is not relevant to this requirement. RESPONSE: Agree; the tables are revised. EPA COMMENT: Page 13, "Table 7. Requirements of a Maintenance Plan," under the heading "Reference" for the item entitled "Verification of Continued Maintenance"; delete the references and insert "Calcagni memorandum, CAA sections 110(a)(2)(B) and (F)." RESPONSE: Agree; the tables are revised. EPA COMMENT: Page 13, "Table 7. Requirements of a Maintenance Plan," under the heading "Category": A periodic three-year inventory is not a requirement for a maintenance plan and this needs to be deleted. An area, however, may commit in the its maintenance plan to prepare a three-year inventory in order to fulfill the requirement for verification of continued attainment (see the Calcagni memorandum, under "d. Verification of Continued Attainment"). RESPONSE: (Page 17) Agree; the 3-year inventory requirement has been deleted from Table 7. The text of Subpart (6)(a) below retains the commitment as a mechanism to verify continued attainment of the standard. EPA COMMENT: Page 14, "Table 7. Requirements of a Maintenance Plan," under the category "maintenance demonstration" for the heading entitled "Requirement": The statement that "Demonstration can be made by showing the that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory ..." is not correct for the Provo area. The Provo area must use the modeling approach. Please refer to our comment above. RESPONSE: (Page 16) Agree. The sentence in Table 7 is revised to read as follows: Provide for Maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. Demonstration can be made by modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS. EPA COMMENT: Page 14, first sentence under "(a) Existing Controls"; refer to "... and enhanced vehicle ...," this needs to correctly state "... a vehicle ... ." RESPONSE: (Page 17) Agree; the word "enhanced" is deleted. EPA COMMENT: Page 14, second sentence under "(2) Improvement in Air Quality Due to Permanent & Enforceable Emission Reductions": This sentence begins with "Area and mobile source emission data..." So as not to preclude any sources of emissions from consideration, this sentence needs to state "Emission data must ..." RESPONSE: (Page 17) Agree. "Area and mobile source" is deleted, and "emission" is capitalized. EPA COMMENT: Page 14, second paragraph, second sentence and third sentence under "(a) Permanent and Enforceable Emission Reductions": The reference in these two sentences to "Subpart e(4)(b)" of the State's maintenance plan appear to EPA to actually refer to Subpart e(4)(a) of the maintenance plan. The State needs to check and change this reference as necessary. RESPONSE: (Page 18) Agree. The change has been made. EPA COMMENT: Page 15, first paragraph, last sentence; the statement appears "... so long as it is needed to demonstrate attainment of the NAAQS." This statement must be removed. Changes to the Utah County I/M program must be approved by the Utah Air Quality Board and approved by EPA as a revision to the SIP before any relaxation or elimination of the I/M control measure can be allowed. RESPONSE: (Page 18) Staff recognizes that any changes in Utah County's I/M program must be included in a SIP or maintenance plan revision, and that any revision must be approved by the Air Quality Board and EPA. Change the sentence as follows: "In addition, Utah County Health Department will continue to operate its vehicle inspection program." EPA COMMENT: Page 17, first paragraph, first sentence the statement appears "... during the early 1990 time period." This should say "... early 1990s time period." Also, the second sentence states "However, no violations of the CO standard have occurred." To be correct, this sentence needs to state "However, no violations of the CO standard have occurred since 1993." RESPONSE: (Page 20) Agree. Amend the text as follows: "These periods are equal in severity and frequency to that which occurred during the early 1990s time period. However, no violations of the CO standard have occurred since 1993." EPA COMMENT:

Page 18, first paragraph, last sentence and throughout the document, references to "Provo": For clarity the State needs to either indicate that all references to "Provo" throughout the maintenance plan document actually refer to Provo City or wherever "Provo" is used it should be stated as Provo City. RESPONSE: On page 1, add a sentence at the end of the first paragraph: Provo refers to the area within the geographic boundaries of the city of Provo, the area addressed by this Plan. EPA COMMENT: Page 18, "Figure 4. Provo 2000 Base-Year Inventory": This figure needs to provide the non-road emissions contribution. RESPONSE: (Page 22) The change has been made. EPA COMMENT: Page 19, "Figure 5. Provo 2001 Base-Year Inventory" and "Table 12. 2000 and 2001 Provo Base-Year Inventories": This figure and table need to provide the non-road emissions contribution. RESPONSE: (Page 23) The change has been made. EPA COMMENT: Page 20, the first paragraph states "The attainment emission inventory reported in Subpart (1) above documents a level of emission in Provo that is sufficient to maintain the NAAQS for carbon monoxide. Emission projections for each source category are used to determine if expected emission levels in future years will exceed the attainment emission inventory level. Maintenance of the NAAQS is demonstrated if the projected emissions remain below the attainment emission inventory level." This discussion of the method for demonstrating maintenance for the CO NAAQS for Provo is not applicable and is incorrect. The Provo area is required to demonstrate maintenance of the CO NAAQS by modeling. Areas with a prior nonattainment designation of "moderate" and with a design value greater than 12.7 ppm were required by section 187(a)(7) the Clean Air Act (CAA) to perform a dispersion modeled attainment demonstration and, therefore, do not qualify to use an "inventory approach" to demonstrate maintenance. The Calcagni memorandum states on page 9, under "b. Maintenance Demonstration": "Under the Clean Air Act, many areas are required to submit modeled attainment demonstrations to show that proposed reductions in emissions will be sufficient to attain the applicable NAAQS. For these areas, the maintenance demonstration should be based upon the same level of modeling." The discussion regarding the "inventory approach" needs to be deleted and replaced with the modeling approach requirements as this is what has been required and prepared by the State for the Provo plan. RESPONSE: (Pages 24-25) Agree. The entire Subpart (2) is deleted, including Tables 13-14. The inventory information that was used for the modeling is found in the Technical Support Document, and is not needed in the text of the Plan. Subsequent subparts and tables are re-numbered. EPA COMMENT: Page 21, "Table 14. Carbon Monoxide Emission Inventories for the Provo Modeling Domain": Does this table reflect emissions from the modeling domain or just Provo City? The table headings need to be consistent, clear, and accurate. This table needs to provide the non-road emissions contribution. Also, there is a math error for the 2015 total emissions; the table show 52.46, but the correct number is 56.34 tons per day. RESPONSE: Table 14 has been moved into Subpart IX.C.6.e(3), Modeling Demonstration, and re-numbered as Table 13. Non-road emissions have been added and the math error is corrected. EPA COMMENT: Page 21, first paragraph, first sentence which states "The emission inventory remains below the attainment emission inventory through the year 2015." As stated above in our comment number 30, the emission inventory approach to demonstrate maintenance of the CO standard is not applicable to Provo. RESPONSE: The entire Subpart (2) is deleted, including Tables 13-14. The inventory information that was used for the modeling is found in the Technical Support Document, and is not needed in the text of the Plan. Subsequent subparts and tables are re-numbered. EPA COMMENT: Page 21, last paragraph, last sentence; the statement appears "... revised Utah statute 41-6-163.6 providing for biennial I/M vehicle emissions testing for vehicles six years old and newer." EPA does not have a record of receiving a revision to the SIP to address this change in the I/M program. This is necessary in order for the changes to the I/M program to be approved either prior to or with EPA's action on the redesignation and maintenance plan SIP submittal. RESPONSE: (Page 26) On January 16, 2004, DAQ staff mailed three separate packets to EPA Region 8. Each packet included: 1) the draft Provo Attainment Demonstration and Maintenance Plan, 2) draft revisions in the

Oxygenated Gasoline rule, 3) draft revisions in SIP section X.A, the general I/M requirements for all counties; 4) draft revisions in SIP section X.D, the I/M requirements for Utah County; 5) the rules incorporating the plans; 6) the newspaper notice announcing changes in the three plans and the oxyfuel rule; and 7) forms for each item for the Division of Administrative Rules. EPA located copies after their comments were submitted, and submitted additional comments on the I/M SIPs. All 3 plans and the oxyfuel rule need to be approved by EPA. EPA COMMENT: Page 22, first paragraph, first sentence; the statement appears "Since the selected intersections show no exceedance of the CO NAAQS ..." This Statement is only true for the 2000 episode modeling with respect to the results displayed in Table 15 on page 22. For the 2001 episode, an exceedance of 9.2 ppm was modeled for 2001 at the 500 North University Ave. & Center Street intersection as displayed in Table 16 on page 23. Carbon Monoxide is an inert pollutant and EPA's modeling guidance indicates that attainment (or in this case maintenance) of the CO NAAQS is shown when the combined UAM-AERO and CAL3QHC values are below 9.0 ppm. Please consult with Kevin Golden of Region 8 staff, on this issue, for further information. The State needs to provide a basis to disregard this 9.2 ppm value for purposes of the maintenance demonstration. EPA suggests a couple of thoughts on this issue. First, the monitors in the Provo/Orem area showed no exceedances of the CO NAAQS in 2001. A discussion of the values, and how they were below the 9.0 ppm standard, should be provided. Second, the State should indicate that the year 2001 has passed and all future modeled projections show attainment at all the modeled intersections. The State also needs to provide an affirmative conclusion that it has demonstrated maintenance of the CO NAAQS through 2015. RESPONSE: (Page 26) Agree; the change has been made. EPA COMMENT: Page 22, Table 15, Figure 6 and on Page 23, Table 16, Figure 7: The University Parkway State Street (Orem) intersection has modeling results displayed for only the years 2000 and 2001 and then is deleted from the data set. An explanation must be provided for why this intersection was removed. RESPONSE: (Page 27) The University Parkway-State Street intersection is in Orem, not Provo, and is not within the nonattainment area. That line has been removed from Tables 15 and 16 (now 13 and 14), and from Figures 6 and 7. EPA COMMENT: Page 23, "Table 16. 2001 Episode and Projections: 8-hour Maximum CO Concentrations (ppm)": We note that the CO concentrations predicted for the 500 North University Ave & Center St. is not demonstrating attainment of the CO standard as the table shows a value of 9.2 ppm. For carbon monoxide attainment and maintenance demonstrations, the standard is met when modeling predicts values of less than 9.0 ppm. Please refer to the comment above. The next year that modeled concentrations are presented for is 2005. The value at the 500 North University Ave & Center St. location is shown as 8.8 ppm. The State has indicated a desire to eliminate the oxygenated gasoline program for the Provo area beginning in November, 2004. As only modeled concentrations for 2001 and 2005 are shown for this intersection (and others), EPA needs to see CO concentrations that are predicted for all six intersections for year 2004 in order to be assured the CO standard will be maintained in the year the control program may be eliminated. The State needs to discuss this issue with Kevin Golden to evaluate a method to determine CO concentrations for 2004. RESPONSE: (Page 27-29) See response for comment above. Modeled values for 2004 have been added. EPA COMMENT: Page 24, second paragraph, first sentence concerning the statement "... so long as they are needed to demonstrate attainment of the NAAQS." This statement must be removed. Changes to the control measures, used to demonstrate maintenance of the CO NAAQS in the maintenance plan, must be approved by the Utah Air Quality Board and approved by EPA as a revision to the SIP. RESPONSE: (Page 31) Staff recognizes that any changes in Utah County's I/M program must be included in a SIP or maintenance plan revision, and that any revision must be approved by the Air Quality Board and EPA. The sentence is amended as follows: Provo will rely on the control programs listed below to demonstrate maintenance of the carbon monoxide standards through 2015. EPA COMMENT: Page 24, third and fourth paragraphs under the heading "(b) Enforceable Control Measures": As noted in our comment number 14 above, EPA has not taken action on the 1994 SIP submittal for

wood burning emissions. The State and EPA need to discuss this prior submittal. The State and EPA also need to discuss the referenced SIP revision, that involved carbon monoxide control strategies for Salt Lake City, Ogden City, and Utah County that was amended by the State in 1998. It does not appear that this revision has been approved by EPA. RESPONSE: (Page 31) Regarding the 1994 SIP submittal's woodburning controls, no action is needed at this time by DAQ or the Air Quality Board. Governor Leavitt submitted the woodburning controls for carbon monoxide along with the Provo CO SIP on July 11, 1994. EPA could approve the wood-burning rules as requested in 1994. Regarding the 1998 amendments to the Carbon Monoxide SIP, they were a clarification of the triggering mechanism for contingency measures for Provo, and are superceded by this Plan. The text of the item is amended as follows: "Utah State Implementation Plan, Section IX, Control Strategies for Area and Point Sources, Part C, Carbon Monoxide, Salt Lake City, Ogden City, and Utah County, as amended in 2004;" EPA COMMENT: Page 24, fifth and sixth paragraphs under the heading "(b) Enforceable Control Measures": In paragraph six it is stated that Prevention of Significant Deterioration (PSD) regulations will apply in Provo. However, in paragraph five, it appears that State and Federal Nonattainment New Source Review (NSR) provisions will also apply. This needs to be clarified as it is unclear if the State intends to apply PSD to the Provo area after it is redesignated to attainment. RESPONSE: (Page 31) Yes, PSD will apply to Provo after redesignation. This is clarified by deleting the following bulleted item: "State and federal nonattainment NSR requirements currently in effect statewide, including R307-401 of the Utah Administrative Code, that requires Best Available Control Technology for all new sources statewide." Utah's NSR program will remain in effect in other areas of the state. EPA COMMENT: Page 25, first paragraph, third sentence under "(5) Contingency Plan": This sentence may be misinterpreted. For clarification, EPA recommends the following replacement language: "The triggering of contingency measures does not automatically require a revision to the SIP or redesignation to nonattainment." RESPONSE: (Page 31) Agree. The text is amended to read as follows: "The triggering of contingency measures does not automatically require a revision to the SIP or redesignation to nonattainment." EPA COMMENT: Page 25, under "5. Contingency Plan," "(b) If the Action Level is Exceeded": The second full paragraph under this heading says: "Immediately following the end of February and the end of the carbon monoxide season each year, DAQ will evaluate monitored data from Utah County to determine whether the NAAQS for CO has been violated." This time frame for analyzing the CO data is not appropriate. As the DAQ will be continuously monitoring the CO monitoring data, the paragraph above needs to be modified to state that DAQ will notify EPA within 30 days of an occurrence of an exceedance of the CO standard. Should a violation of the CO standard occur (two exceedances), this would then trigger the contingency measures plan sooner rather than waiting until the end of February to examine the monitoring data to determine if in fact a violation has occurred. RESPONSE: (Pages 31-33) Under the State-EPA Performance Partnership Agreement, the Air Monitoring Center notifies EPA within 30 days of any exceedance of any standard, and will continue to do so. However, this is raw data. Utah will not trigger implementation of contingency measures until quality-assured monitored data indicates it is necessary to do so. Under 40 CFR 58.35, the State is required to submit the quality-assured monitoring data within 90 days after the end of each calendar quarter; thus, verified data for the October through December quarter will be available by April 1, and verified data for the January through March quarter will be available by July 1. The entire section regarding contingency measures is amended to commit the State to validating data quickly if there are exceedances, and to implementing contingency measures by November 1. EPA COMMENT: Page 25, under "5. Contingency Plan": Language in this section goes back and forth between the "Executive Secretary" and the "Board." The State needs to review this section and make necessary changes for consistent use of terms. RESPONSE: (Pages 31-33) The text is correct as written. Under Title 19, Chapter 2 of the Utah Code, the executive secretary and the Air Quality Board have different duties, and the text reflects that division of responsibilities. EPA COMMENT: Page 25,



paragraph under "(c) Contingency Measures": The single contingency measure listed, the re-implementation of a 2.7% oxygenated fuels program, is insufficient to meet the requirements of section 175A(d) of the CAA and the Calcagni memorandum. EPA believes that additional potential contingency measures must be identified such as: (a) returning to an annual I/M test (as is required by section 175A(d)), (b) re-implementation of a 3.1% oxygenated fuels program, (c) increase the stringency of the carbon monoxide I/M cutpoints, and (d) implementation of an employee trip reduction program. The listing of contingency measures is necessary to identify those measures which could address a violation of the CO NAAQS, but this does not mean they must all be selected and implemented upon a violation. RESPONSE: (Page 33) The Clean Air Act section 175A(d) requires that the state implement all control measures that were in the state implementation plan while the area was designated as nonattainment. To meet that requirement, the following amendment is made in the text on page 25: (c) Contingency Measures. The State will implement contingency measures under this Plan if the contingency action level in Subpart e(5)(a) is exceeded. As required by Section 175A of the Act, the contingency measures to be implemented are: implementation of 2.7% oxygenated gasoline in Utah County from November 1 through the end of February, beginning with one year after it has been determined that the action level has been exceeded; and a return to annual vehicle emissions inspections. The State cannot increase the stringency of the carbon monoxide I/M cutpoints, as they are already as stringent as is allowed under 40 CFR Part 51, Subpart S and Appendix C. Utah's employer-based trip reduction program is implemented voluntarily in Utah County already, and data from other urban areas around the country indicate that such programs are very difficult to implement and that quantifying the benefit from such programs is impossible. On-Board Diagnostics (OBD-II) already is implemented in Utah County. Section XI of the Utah SIP includes other vehicle emission reduction techniques implemented by Metropolitan Planning Organizations, including 700 park and ride stalls in Utah County by 2006. Beyond that, the Act (175A(d)) says that: "Each plan revision submitted under this section shall contain such contingency provisions as the Administrator deems necessary to assure that the State will promptly correct any violations of the standard which occurs after the redesignation of the area as an attainment area. The Calcagni memorandum states (page 8, first paragraph) that: However, any final EPA determination regarding the adequacy of a maintenance plan will be made following review of the plan submittal in light of the particular circumstances facing the area proposed for redesignation and based on all relevant information available at the time." The second-highest 8-hour monitored values of carbon monoxide in Provo have been about half the NAAQS since 2001, and computer modeling for this Plan indicates that carbon monoxide emissions in Provo, as elsewhere in the United States, will drop another 30% between 2005 and 2105. In the Revised Draft 09/06/02 "National Ambient Air Monitoring Strategy," EPA includes the following suggestion for re-directing monitoring resources away from areas where objectives have been achieved: "2. Divestment Opportunities: To make more efficient use of existing monitoring resources and to help pay for (and justify additional resources for) the new monitoring initiatives noted above, it will be necessary to make certain cuts in the existing monitoring program. Two areas of potential divestment are suggested. First, many historical criteria pollutant monitoring networks have achieved their objective and demonstrate that there are no national (and, in most cases, regional) air quality problems for certain pollutants, including PM10, SO2, NO2, CO, and lead. A substantial reduction in the number of monitors for these pollutants should be considered." RESPONSE: In the foreseeable future, Utah will continue to monitor for carbon monoxide, but "all relevant information available at the time" that EPA is considering approval of the maintenance plan, as directed in the Calcagni memo, indicates that the likelihood is approximately zero that contingency measures would be triggered in the next eight years before the plan is revised. EPA COMMENT: Page 26, under "(6) Verification of Continued Attainment" and "(b) Analyze Ambient CO Monitoring Data": The second sentence of this paragraph states: "Any exceedance of the standard will be reported to EPA." As indicated in our

comment above, a specific time frame for reporting this information to EPA needs to be included (i.e., DAQ will notify EPA within 30 days of an occurrence of an exceedance of the CO standard.) RESPONSE: (Page 33) Under the State-EPA Performance Partnership Agreement, the Air Monitoring Center notifies EPA within 30 days of any exceedance of any standard, and will continue to do so. However, this is raw data. Under 40 CFR 58.35, the State is required to submit quality-assured monitoring data within 90 days after the end of each calendar quarter; thus, verified data for the October through December quarter will be available by April 1, and verified data for the January through March quarter will be available by July 1. DAQ staff review the monitoring data every day, and the Air Quality Board reviews the data at every meeting. The State of Utah has in the past implemented voluntary measures to avoid violation of the NAAQS, particularly for ozone, and expects to continue to do so. The State will keep EPA informed of any exceedances. The sentence is revised as follows: Any exceedance of the standard will be reported to EPA within 30 days, and quality-assured data will be reported as required under 40 CFR Part 58. EPA COMMENT: Page 26, first paragraph, second sentence under the heading "(d) Provisions for Revising the Maintenance Plan": This sentence states "The State will also revise the Plan as necessary to comply with any EPA finding ..." We suggest changing this to read as "The State will also revise the Plan as necessary to comply with any State or EPA finding ..." RESPONSE: (Page 33) Staff disagrees. A State finding does not mandate a revision in the Maintenance Plan. EPA COMMENT: Page 26, first paragraph, first sentence under the heading "(f) Subsequent Maintenance Plan Revisions": Delete the portion which says "... and maintenance plan approval." The obligation for the second maintenance plan revision is triggered by the promulgation of the redesignation to attainment only. RESPONSE: (Page 34) Agree. The text is amended as follows: "The Clean Air Act requires that a maintenance plan revision be submitted to the EPA no later than eight years after the promulgation of the original redesignation." EPA COMMENT: Page 27, under "f. Conformity": The transportation conformity description and the derivation of the CO motor vehicle emissions budgets (MVEB) is not correct. The original CO nonattainment area boundary was defined by EPA as "Provo Area, Utah County part, City of Provo" on November 6, 1991 (56 FR 56694, page 56839). EPA has not changed this boundary and the State's proposed attainment/maintenance plan references only the City of Provo. Given this boundary, the MVEBs will only apply for that area. The maintenance plan needs to make explicit that the MVEBs are for Provo City only and not the larger modeling domain. The State's description under "f. Conformity" states that mobile source figures from the projection emission inventories indicate that a budget of 70.44 tons per day of CO would apply to any analysis year between 2005 and 2014 and that a budget of 72.10 tons per day would apply to 2015 and beyond. The mobile sources emissions for Provo are found in "Table 14. Carbon Monoxide Emission Inventories for the Provo Modeling Domain" (table labeled as "Provo City (Tons per Day)"). Because this is a modeled maintenance demonstration, the State cannot assume that higher emission inventory values from earlier years are consistent with maintenance. The earlier, higher emission inventory values would need to be modeled to derive any available safety margin for use in later years. Some form of an analysis (perhaps qualitative) would also be necessary to ensure the MVEBs would not interfere with maintenance in the years between the modeled years. As the State did not model emissions of 70.44 tons per day for 2008, 2011, or 2014, it cannot say with certainty that level of mobile source emissions would not cause an exceedance of the CO standard. This comment also applies to the use of 72.10 tons per day in 2015. We note that interim year budgets are not required, but are optional, with one exception. Assuming the Provo attainment/maintenance plan SIP revision will be submitted to EPA in 2004, the State would only have to provide MVEBs for two years; 2014 and 2015 and beyond. Forty CFR 93.118(b) requires selection of at least one horizon year that is 10 years or less in the future; for the State's demonstration, this would be no later than 2014. We suggest 2014 because for that budget you would then only need to model maintenance for 2014; if you selected an earlier year, you'd need to model maintenance for that earlier year as well as



subsequent years before 2015, and conduct additional analyses to ensure consistency with maintenance. If the State wishes to use 70.44 tons per day as the MVEB for 2014, it must provide a demonstration that using 70.44 tons per day, instead of the modeled 52.88 tons per day, will not cause an exceedance of the CO standard. If the State wishes to use 72.10 tons per day as the MVEB for 2015 and beyond, it must provide a demonstration that using 72.10 tons per day, instead of the modeled 52.46 tons per day, will not cause an exceedance of the CO standard. We suggest contacting Kevin Golden of Region 8 for any questions regarding the modeling.

RESPONSE: (Page 35-36) Agree; the changes have been made. DAR #26898-9: AMEND THE VEHICLE INSPECTION AND MAINTENANCE PLAN FOR UTAH COUNTY AND THE GENERAL PROVISIONS. DAQ STAFF COMMENT: In Part A, page 2, strike out "1990" in the title of the top Census table. (Bill Colbert) RESPONSE: Agree; the change has been made.

EPA COMMENT: General I/M, Part A: Pages 3 and 4: Delete all references to "Non-attainment." With the approval of the documents, all the areas will be maintenance.

RESPONSE: Agree; the change has been made. EPA COMMENT: Utah County, Part D: Page 3: 2nd paragraph: Federal Register Notice should be "67 FR 57744" not "67 FR 57775."

RESPONSE: Agree; the change has been made. EPA COMMENT: Page 3: 4th paragraph: Delete the word "enhanced" before "I/M." RESPONSE: Agree; the change has been made.

EPA COMMENT: Page 3, under "2. Network type," first sentence: Add phrase "as approved by EPA on September 12, 2002 (67 FR 57744)." RESPONSE: Agree; the change has been made.

EPA COMMENT: Page 20, under "19. I/M SIP implementation": delete phrase "and shall continue until a maintenance plan without an I/M program is approved by EPA in accordance with Section 175 of the Clean Air Act as amended." RESPONSE: Staff disagrees; this statement is accurate as it is written. The I/M program will remain in effect until the Air Quality Board and EPA approve amending the maintenance plan to delete the program. DAQ STAFF COMMENT: The date of Board adoption should be changed in R307-110-12, R307-110-31, R307-110-24, and on the title pages of the Carbon Monoxide Plan and the two Vehicle I/M plans. The Board has changed its meeting date from April 7, to March 31. (Jan Miller) RESPONSE: The date on each is changed from April 7, 2004, to March 31, 2004. These are nonsubstantive changes and can become effective at the same time the rules and plans become effective. DAR # 27295: UPDATE CARBON MONOXIDE MAINTENANCE PLAN FOR SALT LAKE CITY. DAQ STAFF COMMENT. Page 1, line 34: The woodburning control program, R307-302-3, applies in Salt Lake County for PM10 but not for carbon monoxide. The reference is deleted.

DAQ STAFF COMMENT. Throughout the SIP, the emissions have been re-calculated to reflect the most recent version of EPA's factors for miscellaneous non-road mobile emissions. The new factors generally predict lower emissions than the previous factors. Changes are found in Tables 1 - 3, and at page 2, line 15; page 5, lines 20 and 21; and page 7, lines 16 - 26. EPA COMMENT. Page 5, first paragraph, last sentence, states "As the projections demonstrate, this change in the I/M program does endanger attainment of the standard." Based on the information provided in this paragraph above this sentence and in table 3 of the maintenance plan, we believe the intent of this sentence is there is no endangerment for the CO standard. We recommend this sentence to be adjusted to read "...in the I/M program does not endanger continued attainment of the standard."

RESPONSE: This correction was made at the Air Quality Board meeting on July 7, 2004, at which the Plan was proposed for public comment. EPA COMMENT. Page 6, third paragraph: The requirements and EPA's policy on motor vehicle emissions budgets are found in the preamble to the November 24, 1993, transportation conformity rule (58 FR 62193-96). The criteria for the analysis to determine the conformity of transportation plans, TIPs, and projects are found in the 40 CFR 93.118. For accuracy and clarity, the above distinctions need to be clarified in this paragraph of section IX.C.7.d. RESPONSE: The references are changed on page 6, lines 20 - 29 to clarify this distinction. EPA COMMENT. Page 7, paragraph four, last sentence which currently reads "Therefore, the MVEB for 2005 is 277.5 tons per day." This sentence is fine, however, we would just like to clarify for the State that this MVEB will actually apply to all years

from 2005 to 2018 as another MVEB is not specified until 2019. This interpretation is consistent with the preamble to our November 24, 1993 rule noted above. RESPONSE: Agree. No change is needed. EPA COMMENT. Page 7, paragraph five, last sentence which currently reads "Therefore, the MVEB for 2019 is 262.81 tons per day." As noted for comment three above, this sentence is fine; but to clarify, the State should be aware that this MVEB will apply to 2019 and beyond as another MVEB is not specified after 2019. RESPONSE: Agree. See response for Comment #2 above. EPA COMMENT. Page 7, paragraph six: This paragraph is not accurate. Because the existing maintenance plan contains a budget for 2005, the new budget will only take effect after EPA approves the maintenance plan. The 2019 budget will take effect upon approval of the maintenance plan or upon a finding of adequacy by EPA, whichever comes first. Please note, the existing budgets for 2006 and 2016 will remain in effect until EPA approves the revision to the maintenance plan. RESPONSE: Agree. Because the 2005 Motor Vehicle Emissions Budget is specified in the current Plan, EPA cannot agree to changing it by making an adequacy determination. The sentence on page 7, lines 36 - 38 is amended to read as follows: "This new MVEB will take effect for future transportation conformity determinations upon approval of this Maintenance Plan by EPA." EPA COMMENT. Page 7, paragraph seven: This paragraph is inaccurate and unnecessary and should be deleted. First, a state is never required to specify a budget for a year after the maintenance year. Second, under 93.102(b)(3), the conformity regulations apply to a maintenance area for 20 years from redesignation, unless the SIP says that the conformity requirements apply for longer. Thus, it appears that the State doesn't need to say anything on this subject in the maintenance plan. However, if the State wants to say anything on the subject, we recommend the following: "Pursuant to 40 CFR 93.102(b)(3) as currently written, no further conformity determinations for the Salt Lake County CO maintenance area will be necessary after March 22, 2019." RESPONSE: EPA sent further comments later, stating that "Our prior comment could have been more precise," and that their intent is to clarify "...to avoid future confusion and arguments." DAQ staff have modified the language pertaining to the 2019 MVEB to match the EPA revisions. EPA COMMENT. Page 7, first paragraph under section IX.C.7.e: the first sentence needs to be changed to reflect the air quality monitoring commitment that was provided in the Provo carbon monoxide attainment/Maintenance plan. The Provo plan states "The State commits to continue operating the existing CO monitoring sites according to the requirements of 40 CFR part 58 and will gain EPA approval before any changes are made to the Utah County CO monitoring network." RESPONSE: The sentence is changed to specify that DAQ will obtain EPA approval before making changes in the monitoring network: "Utah will continue to operate an appropriate air quality monitoring network of NAMS and SLAMS monitors in accordance with 40 CFR Part 58 to verify the continued attainment of the CO NAAQS, and will gain EPA approval before making any changes to the Salt Lake City monitoring network." EPA COMMENT. Page 7, first paragraph under IX.C.7.e: The second sentence states "...WFRC will request DAQ to perform a saturation monitoring study to determine whether additional and/or re-sited monitors are necessary." The WFRC is the metropolitan planning organization (MPO) that addresses transportation planning efforts affecting Salt Lake County. It is the responsibility of the UDAQ to decide if the air quality monitoring network is adequate to address changes in congestion, transportation, VMT, etc. and not the WFRC. This sentence needs to be changed to reflect this division of responsibility, i.e., it should read "...change significantly over time, DAQ will perform a saturation monitoring study..." RESPONSE: Agree. The change is made. EPA COMMENT. Page 9, first paragraph under section IX.C.7.f(3), second sentence which states: "WFRC will select the contingency measures from the following list..." As the WFRC is the MPO for the Salt Lake City and does not have the necessary regulatory authority to select and implement contingency measures, this sentence needs to be changed to reflect that the State and/or the UAQB will select the necessary contingency measures. RESPONSE: Agree. The paragraph is re-written as follows to indicate that DAQ will consult with WFRC and Salt Lake City officials in choosing the contingency measures, and sets

forth the criteria to be used in making that selection: "The State, in consultation with the WFRC and Salt Lake City officials, will choose one or more of the following contingency measures. Measures will be chosen to bring the area back into compliance quickly, and to meet the specific needs of Salt Lake City. It is likely that no federal money will be available to fund the implementation of the selected contingency measure(s). Most, if not all, of the costs will be borne by local citizens and Salt Lake City, local industries, and state government agencies." DAR #27343. UPDATE OGDEN MAINTENANCE PLAN FOR CARBON DIOXIDE. EPA COMMENT 1: Page 1, second paragraph, 1st sentence states *...revises the 2005 on-road mobile source carbon monoxide attainment emissions inventory for 1992...* This phrase is unclear. We note in the discussion of emission inventories in Section IX.C.8.b on page 2 that the 1992 attainment year inventory was revised to use the MOBILE6.2 model. Is this correct for 1992, or was the 2005 inventory actually modified as a surrogate for 1992? RESPONSE: Agree. Revise as follows: *"...revised the on-road mobile source carbon monoxide attainment emissions inventory for 1992..."* COMMENT 2: Page 1, third bullet under IX.C.8.b. *Emission Inventories and Maintenance Demonstration*: this paragraph needs to be clarified as follows: "Automobile Inspection and Maintenance Program. SIP Section X, Vehicle Inspection and Maintenance Program, Part E, Weber County, adopted November 3, 2004, including the Weber-Morgan District Health Department Ordinance 2003-28, revised June 10, 2003. The program is set forth in SIP Section X.E, Weber County I/M program, last approved by EPA on July 17, 1997 (see 62 FR 38213)" RESPONSE: Agree; this change has been made. COMMENT 3: Page 6, second paragraph under section IX.C.8.d Mobile Source Carbon Monoxide Emissions Budget for Transportation Conformity: The title of this section should use *...Budgets...* for clarity and accuracy, the first sentence of this paragraph should be changed to read as "The federal conformity rule, at 40 CFR Part 93, subpart A, and its preamble (58 FR 62193), indicate that motor vehicle emission budgets must be established for the last year of the maintenance plan, and may be established for any other years deemed appropriate." RESPONSE: Agree; the change has been made. COMMENT 4: Page 7, paragraph 6: This paragraph is not accurate. Because the existing maintenance plan contains a budget for 2005, the new budget for 2005 will only take effect after EPA approves the maintenance plan. The 2021 budget will take effect upon approval of the maintenance plan or upon a finding of adequacy by EPA, whichever comes first. Please note, the existing budgets for 2004, 2005, 2006, 2007, and 2008 and following years through 2017, will remain in effect until EPA approves the revision to the maintenance plan. Also, "These new MVEB..." should be changed to the plural as in "These new MVEBs..." RESPONSE: Agree. Because the 2005 Motor vehicle Emissions Budget is specified in the current Plan, EPA cannot agree to changing it by making an adequacy determination. The sentence on page 7, lines 41-43 is amended to read as follows: "These new MVEBs will take effect for future transportation conformity determinations upon approval of this Maintenance Plan by EPA or, for 2021, upon a finding of adequacy by EPA, whichever comes first." COMMENT 5: Page 7, paragraph 7: This paragraph is inaccurate and unnecessary and should be deleted. First, a state is never required to specify a budget for a year after the maintenance year. Second, under 93.102(b)(3), the conformity regulations apply to a maintenance area for 20 years from redesignation, unless the SIP says that the conformity requirements apply for longer. Thus, it appears that the State doesn't need to say anything on this subject in the maintenance plan. However, if the State wants to say anything on the subject, we recommend the following: "Pursuant to CFR 93.102(b)(3) as currently written, no further conformity determinations for the Salt Lake County [sic] CO maintenance area will be necessary after May 8, 2021." RESPONSE: Agree; this change is made. COMMENT 6: Page 8, first paragraph under section IX.C.8.e: the first sentence needs to be changed to reflect the air quality monitoring commitment that was provided in the Provo carbon monoxide attainment/maintenance plan. The Provo plan state "the State commits to continue operating the existing CO monitoring sites according to the requirements of 40 CFR part 58 and will gain EPA approval before any changes are made to the

Utah County CO monitoring network." RESPONSE: The sentence is changed to specify that DAQ will obtain EPA approval before making changes in the monitoring network. "Utah will continue to operate an appropriate air quality monitoring network of NAMS and SLAMS monitors in accordance with 40 CFR Part 58 to verify the continued attainment of the CO NAAQS, and will gain EPA approval before making any changes to the Ogden monitoring network." COMMENT 7: page 8, first paragraph under IX.C.9.e: The second sentence states "...WFRC will request DAQ to perform a saturation monitoring study to determine whether additional and/or re-sited monitors are necessary." The WFRC is the metropolitan planning organization (MPO) that addresses transportation planning efforts affecting Weber County. It is the responsibility of the UDAQ to decide if the air quality monitoring network is adequate to address changes in congestion, transportation, VMT, etc. and not the WFRC. This sentence needs to be changed to reflect this division of responsibility; i.e., it should read "...change significantly over time, DAW will perform a saturation monitoring study." RESPONSE: Agree. The change is made. COMMENT 8: Page 9, first paragraph under section IX.C.8.f(3), first sentence which states "The WFRC may choose one..." and the second sentence which states: "WFRC will select the contingency measures from the following list..." As the WFRC is the MPO for the Ogden City/Salt Lake City region and does not have the necessary regulatory authority to select and implement contingency measures, this sentence needs to be changed to reflect that the State and/or the UDAQ will select the necessary contingency measures. RESPONSE: Agree. The paragraph is re-written to indicate that DAQ will consult with WFRC and Ogden officials in choosing the contingency measures, and sets forth the criteria to be used in making that selection: "The State, in consultation with the WFRC and Ogden City officials, will choose one or more of the following contingency measures. Measures will be chosen to bring the area back into compliance quickly, and to meet the specific needs of Ogden. It is likely that no federal money will be available to fund the implementation of the selected contingency measure(s). Most, if not all, of the costs will be borne by local citizens and Ogden City, local industries, and state government agencies." COMMENT 9: Page 9, under "3. List of Potential Contingency Measures," the phrase "as allowed by statute" which appears at the end of the second and third bulleted items: EPA's preference is that these phrases be removed. The State has the discretion to decide whether to pursue these particular contingency measures or not, but including this phrase calls into question whether these contingency measures can actually be implemented. RESPONSE: The second bullet lists as possible contingency measures: "Improving the current I/M program in the Ogden area, such as increasing the maximum repair cost limits or totally eliminating emissions test waivers for vehicles that have failed the test, as allowed by statute," DAQ agrees with EPA's comment. The relevant statute, Utah Code 41-6-163.6(2), states that "The legislative body of a county identified in Subsection (1) shall make rules regarding emission standards, test procedures, inspection stations, repair requirements and dollar limits for correction of deficiencies, and..." Thus, cost limits and emissions test waivers can be changed by county action if necessary. Regarding the third bullet, DAQ proposes to retain the language. The third bullet lists "Mandatory Employer-Based Travel Reduction programs as allowed by statute." Utah Code 19-2-104(1) states that the Air Quality Board may make rules...(h) with the approval of the governor, implementing in air quality nonattainment areas employer-based trip reduction programs applicable to businesses having more than 100 employees at a single location and applicable to federal, state, and local governments to the extent necessary to attain and maintain ambient air quality standards consistent with the state implementation plan and federal requirements under the standards set forth in Subsection (2);... Therefore, it is clear that there are specific limitations imposed by Utah statutes on the kind of Employer-Based Trip Reduction Program that could be implemented. It is appropriate to keep the reference to the statute in this case, in order to distinguish the kind of program that could be implemented in Utah from the model Employer-Based Trip Reduction that EPA has designed. In addition, the statute is clear that the program could not be implemented by action of the Air Quality Board alone; the approval

of the Governor also must be obtained. COMMENT 10: Page 9, under "3. List of Potential Contingency Measures: " Section 175A(d), Contingency Provisions of the CAA states, in part, "Such provisions shall include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area."

Therefore, the 2.7% oxygenated gasoline program, that was approved by EPA into the SIP and applied to the Ogden City area before its redesignation to attainment, must be included on the list of potential contingency measures. RESPONSE: It is true that the Clean Air Act required implementation 2.7% oxygenated gasoline in the Salt Lake-Ogden metropolitan statistical Area. However, the Clean Air Act allows waivers of that requirement where implementation of oxygenated gasoline might jeopardize attainment of another health standard. In this case, there was concern that use of oxyfuel could increase nitrogen oxide emissions that contribute to formation of PM<sub>10</sub>. Utah sought such waivers for Salt Lake City and Ogden until the Maintenance Plans for those areas were approved by EPA. Oxyfuel was never implemented in Ogden, but, because its use was required by the Clean Air Act, its use was included as a contingency measure in the Ogden Maintenance plan approved by EPA on March 9, 2001.

Because use of oxygenated gasoline was required for the Ogden area under the Clean Air Act, and because SIP measures must be included as contingency measures in maintenance plans, DAQ staff recommends including it as a contingency measure in the current Maintenance Plan, with the caveat that it will not be implemented that would interfere with attainment of any other National Ambient Air Quality Standard. DAR #27429. SULFUR DIOXIDE MAINTENANCE PLAN FOR SALT LAKE COUNTY AND EASTERN TOOELE COUNTY. EPA COMMENT: There are no monitors located in the Tooele County portion of the nonattainment area. Therefore, the State cannot claim that the entire nonattainment area is in fact attaining the standards.

RESPONSE: The Tooele County portion of the nonattainment area is also the area referred to as the elevated terrain. Attainment in the high terrain was addressed in the modeling analysis relied upon in the approved attainment SIP. The maintenance plan continues to rely upon that same modeling analysis, and therefore continues to demonstrate attainment in the elevated terrain and by definition in Tooele County. In the SIP, this analysis is presented in Section IX.B.3.d. Our intention is to present the maintenance portion of the SO<sub>2</sub> story at Section IX.B.6, as an extension of what already appears in the SIP, but it should perhaps be made more clear therein that the modeling analysis from the approved attainment SIP will continue to function as the demonstration showing that ambient concentrations of SO<sub>2</sub> will remain within the levels prescribed by the National Ambient Air Quality Standards (NAAQS) in the elevated terrain so long as the emission limits at the smelter remain at or below those used in the analysis. To that end, we are proposing to insert new language within Section IX.B.6.c.(1) of the proposed Maintenance Plan to clarify this. We have also added language in Section IX.B.6.b.(1) to describe how attainment of the standard in the elevated terrain is determined in the absence of monitored data. EPA COMMENT: One of the monitors that had recorded violations in 1981 (Airs No. 49-035-2002) is no longer in service. The State would need to show that one of the current monitors is still representative of that location. The map labeled Figure 1 in the proposed maintenance plan shows the locations of all SO<sub>2</sub> monitors, both current and historical. The monitor in question (Airs No. 49-035-2002) is labeled number 5 on the map. One can see that it is very close to the monitor labeled number 6. Number 5 was taken out of service after 1983 because the lake rose and flooded the site. The Division of Air Quality (DAQ) operated the monitor at site number 6, essentially the same location as site number 5, from 1986 - 1991. At some time in 1991, the monitor was moved from location number 6 to location number 7; the marina at Great Salt Lake State Park. In 1992 the monitor was repositioned within the marina to accommodate some remodeling, but essentially locations 7 and 8 are the same. The monitor continues to operate at site number 8. All four of these site locations are collectively referred to as the "Beach" site(s), and language has been added in Section IX.B.6.b.(1) to make this clear.

The (1993) Annual Network Review, used to evaluate the adequacy of the monitoring network for all criteria pollutants, says that "The background for SO<sub>2</sub> is assumed to be zero, therefore monitoring is necessary only in areas where there are sources of SO<sub>2</sub>." Hence, each of the "Beach" monitors was situated so as to measure "impact from a significant source, a copper smelter." When the monitor was moved to the marina, DAQ submitted to EPA Region VIII an Ambient Air Monitoring Network Modification Request Form. Therein, the modification was described as "relocation of Beach site to a location of potentially higher point source impact as determined by visual observation and citizen complaints." As discussed in the 1994 Annual Network Review, "The site routinely measures short timed SO<sub>2</sub> spikes above 0.8 ppm that last 3 to 10 minutes. This site is properly located to meet our present data needs." Further evidence of the new Beach location(s)' representativeness of the impact from the copper smelter may be seen in Figure 3 of the proposed maintenance plan. This histogram charts the history of the 2<sup>nd</sup> highest 24-hr values measured there, and one can see that it captures the trend of declining concentrations coinciding with the smelter modifications that took place from 1992 through 1995. This trend is also depicted in Figure 4 of the proposed maintenance plan, which illustrates the history of Kennecott's SO<sub>2</sub> emissions. EPA COMMENT: Section IX.B.6.b(3) is confusing, and should clearly indicate what are the current enforceable requirements for Kennecott. The 4<sup>th</sup> paragraph of this section indicates that control of low-level emissions at KUC has resulted in lower concentrations recorded at the Beach site(s). EPA would like to know if these controls have been reflected in SIP limits and/or operating practices and been approved by EPA. RESPONSE: Section IX.B.6.b.(3) has been re-worked to more clearly describe the sequence of events at the smelter as it applied to both air quality emission limits and SO<sub>2</sub> concentrations at various locations. In a word, the low-level emissions were controlled once in the late 1970s and early 1980s. These controls were reflected in the Utah administrative rules for air quality (R307,) and effectively lead to the end of SO<sub>2</sub> exceedances at the Beach site(s). Low-level emissions were controlled again during a period of smelter modernization in the early 1990s. These controls were also incorporated into the Utah SIP, and remain federally enforceable. EPA COMMENT: The 2<sup>nd</sup> paragraph indicates that, at one time, R307 was revised to include emission limits and control requirements for the KUC smelter main stack and smelter fugitive emissions. EPA wants to know if these requirements are still enforceable or whether they have been superseded by the PM<sub>10</sub> SIP. They would like clarification as to the current status of such in the maintenance plan, and they would like to know where these limits actually appear. RESPONSE: As discussed above, this has been addressed in a re-worked Section IX.B.6.b.(3). Section IX.B.6.c.(1) has also been re-worked to clarify what is being relied upon in this maintenance plan to demonstrate continued compliance with the SO<sub>2</sub> NAAQS. The present status of emission limits is discussed therein, and a table has been added to illustrate the succession of emission limits as they pertained to the different stages of smelter modification. EPA COMMENT: The 3<sup>rd</sup> paragraph references Part H of the SIP. EPA still refers to this as Appendix A to the PM<sub>10</sub> SIP, and ask that we provide a parenthetical reference. RESPONSE: DAQ will add a parenthetical reference to Appendix A wherever appropriate. EPA COMMENT: The 2<sup>nd</sup> paragraph of Section IX.B.6.c.(1) indicates that the modeling and monitoring relationships outlined in Section IX.B.3.d. (of the SO<sub>2</sub> attainment SIP) suggest a safety factor of roughly 100%. EPA does not understand this statement, and asks for further clarification. The last sentence of this section also indicates that "those emission limits remain federally enforceable, and are not expected to increase over the next ten years." The State must commit to continued implementation of these limits. RESPONSE: The modeling / monitoring relationship outlined in Section IX.B.3.d. is able to predict a concentration by evaluating a given emission rate. The emission rates so evaluated are the federally approved emission limits for the smelter, and the predicted concentrations are then compared with the SO<sub>2</sub> NAAQS. This information has been tabulated in Section IX.B.3.d.(4), and the results show that the predicted concentrations are roughly one half of the respective NAAQS. This means that we could double KUC's emission limits and still attain the SO<sub>2</sub>

standards. In other words, the emission limits could be 100% larger and we would still attain the standards. Another way to express this is to say that there is a "safety factor of roughly 100%." The second part of this comment concerns a commitment to continue implementation of these limits. The limits are in fact already a federally enforceable part of the Utah SIP. However, to make this entirely clear, we have added language on page 13 to specify that "These conditions demonstrate maintenance through the year 2016." EPA COMMENT: The maintenance plan does not contain an emissions inventory and needs to do so. RESPONSE: While DAQ recognizes that EPA's comment may be attributed to the Calcagni Memorandum (Sept. 4, 1992), wherein guidance is presented for processing requests to redesignate areas to attainment, we are not necessarily convinced that the inclusion of this element is vital to the approvability of the plan. The "attainment inventory" is discussed by Calcagni as one of the core provisions that should be considered by states for inclusion in a maintenance plan. The guidance anticipates that the (listed) provisions will be necessary to a generic maintenance plan, but also notes that the adequacy of any maintenance plan will be made "in light of the particular circumstances facing the area proposed for redesignation." The circumstances in this case surround an area that was designated nonattainment based on the SO<sub>2</sub> emissions from a single source; the copper smelter at Kennecott. According to Calcagni, the stated purpose of the attainment inventory is to establish the level of emissions during the time periods associated with monitoring data showing attainment. This is particularly important in those instances where a maintenance demonstration for the area is based on the notion that the future emissions in that area would remain within the levels established by just such an inventory. In such an instance, the attainment inventory would be compared with projection inventories compiled for the 10-year duration of the maintenance plan. So long as the projected inventory was less than the attainment inventory, one could continue to assume attainment of the NAAQS. By contrast, a maintenance demonstration could instead be founded on a modeling analysis. In that case, continued attainment would be demonstrated by running an air quality model which considers factors related to meteorology, topography, and certain stack characteristics as well as the emissions of an air contaminant. After evaluating all of these factors, the model would then predict concentrations of the air contaminant that could be compared to the relevant health standard. Depending on the mix of sources to be evaluated by such a model, it may be necessary to compile an inventory that would be used by the model. As discussed above, Utah is still relying on the modeling analysis described in Section IX.B.3.d of the approved attainment SIP to demonstrate compliance with the SO<sub>2</sub> NAAQS in the elevated terrain. In this analysis, a suite of emission limits representing each different averaging period was plugged into the modeled relationship. These are the same emission rates that would be used to generate an emissions inventory for this source. As such, this suite of emission limits constitutes a surrogate emissions inventory for the sole source of SO<sub>2</sub> affecting the area. Hence, this surrogate inventory assumes the role for which the actual attainment inventory was intended; that is, it represents a period in time during which the standards for SO<sub>2</sub> were being attained, and thereby identifies a level of emissions below which attainment of the NAAQS may be presumed. The same approach for demonstrating continued attainment in the low terrain has been outlined in the re-worked Section IX.B.6.c.(1). In this case, the emission limits for the sources affecting the low terrain were modeled as part of the 1981 SO<sub>2</sub> SIP, and a relationship was established to ensure attainment of the standards so long as those emission limits were retained. When the smelter was modernized in the early 1990s, these emission limits were largely superseded by limits that were more stringent. These new limits were incorporated into the Utah SIP, and the federal enforceability of these limits is enough to ensure continued maintenance of the SO<sub>2</sub> NAAQS. Nevertheless, a Table 4 has been added to Section IX.B.6.c.(1) in order to provide the reader with a representative emission inventory for all of the significant sources of SO<sub>2</sub> at Kennecott affecting both low and high terrain. These inventories of actual emissions reflect the succession of smelter modifications and the associated emission limitations relied upon by the SO<sub>2</sub> attainment SIPs of both 1981 and 1992. EPA COMMENT: A maintenance plan may



generally demonstrate continued compliance with the NAAQS by either a modeling analysis or by comparison with an attainment inventory. Utah's proposed plan does neither. At a minimum there should be a maintenance inventory for the portion of Tooele County above 5,600 feet and the area around the KUC smelter (below which there would be no violation of the NAAQS.) For the remainder of Salt Lake County, there should be a modeled demonstration of continued compliance. In both cases, emission estimates should reflect permanent enforceable measures and should be consistent with the various averaging periods of the respective NAAQS. Any such limits must be practically enforceable, and the State must commit to continued implementation of such. RESPONSE: See previous discussion for the basis of an attainment/maintenance demonstration. As noted before, DAQ will clarify in the maintenance plan that it is continuing to rely upon the modeling analyses that served as the basis for the federally approved attainment SIP. The emission limits used therein do in fact represent permanent enforceable measures, and are consistent with all three averaging periods for the SO<sub>2</sub> NAAQS. These limits appear in the SIP at Section IX.H. and thereby establish the basis for a commitment to the continued implementation of the control measures they represent. See the discussion at item no. 14 concerning the remainder of Salt Lake County. EPA COMMENT: The draft maintenance plan does not contain a projected maintenance year. Any such plan must demonstrate continued compliance for 10 years. Adding two years for EPA review, the maintenance year should be 12 years from the date of submittal. RESPONSE: DAQ understands that a maintenance plan must demonstrate continued compliance with the respective NAAQS for at least 10 years from the date of approval. Practically speaking, this requirement is protective of the emissions creep that is generally associated with an urban area. When there are many different sources that contribute to a situation of nonattainment, to which trends of projected growth or decline may be ascribed, it is necessary to evaluate the sum of their emissions (ten years) into the future in order to determine, by modeling or by inventory, whether compliance with the NAAQS is still presumed after ten or twelve years. In this case, the only SO<sub>2</sub> emissions that are significant to the modeled demonstration of continued attainment are constrained by emission limits that are contained in a federally approved SIP. This means that there is no projected trend of growth or decline, and that therefore the presumption of continued attainment extends indefinitely into the future. Nevertheless, we have added language in Section IX.B.6.c.(1) to reaffirm that "These conditions demonstrate maintenance through 2016." (see also response to comment above) EPA COMMENT: Section IX.B.6.c.(3) and Table 3 within do not accurately reflect the stated requirement of CAA Section 175A(c), which states that part D of the Act continues to apply until the area is redesignated. Evidently what we have said, that the part D provisions will remain in effect until the area is redesignated, implies that the SIP elements would no longer apply after redesignation. This would be backsliding. RESPONSE: It is certainly not the intention of DAQ to abandon the elements of the SO<sub>2</sub> SIP should the area be redesignated to attainment. Both Table 3 and Section IX.B.6.c.(3) will be revised to more accurately reiterate the language contained in CAA Section 175 A.(c). (see also response to comment above) EPA COMMENT: EPA is uncomfortable with the notion of pre-implemented contingency measures for a couple of reasons. First, Section IX.B.6.c.(1) implies earlier that credit for these "other" sources in the PM<sub>10</sub> SIP is being taken as part of the maintenance plan. Second, if there was a violation of the NAAQS the State would not be able to rely on these pre-implemented measures to address the violation. RESPONSE: Although pre-implemented contingency measures are not unprecedented, DAQ understands EPA's concerns surrounding the contingency measure element of the proposed maintenance plan. Due in large part to the confidence we have that these measures will not be needed, we can agree to re-structure Section IX.B.6.c.(4) such that pre-implementation will no longer be an issue. See discussion below. EPA COMMENT: The plan must identify a list of potential contingency measures which includes, at a minimum, further controls on stationary sources. They provide some language from another maintenance plan that we could use. Also, the schedule for corrective action is too



short. They suggest an implementation deadline of one year from the date of violation.

RESPONSE: Given the flexibility exhibited in the language suggested by EPA, DAQ can agree to re-structure the contingency provisions to include some potential measures as well as a more definite schedule for ultimate implementation. See Section IX.B.6.c.(4) for proposed language.

EPA COMMENT: The State must assure that it is ready to implement PSD in the area once it is redesignated. RESPONSE: DAQ is well aware of the changes that will result to the permitting

program should the area be redesignated to attainment. Utah is a "SIP approved" state with respect to the PSD program, meaning that our rules reflect, to a large degree, the construct of the federal PSD rules (at CFR 51.166.) The way in which Utah's rules are structured will allow for immediate implementation of the PSD program in any nonattainment area once it becomes redesignated to attainment. As a separate project, DAQ is planning to amend the state PSD

permitting rules to adopt the NSR reform provisions, as required by the federal rule, by the beginning of 2006. EPA COMMENT: To the extent that control measures must remain in effect and federally enforceable, the SIP still contains variance provisions and certain Director's

Discretion that serve to undermine this requirement. RESPONSE: As EPA is well aware, these issues are presently being addressed within the context of the forthcoming PM<sub>10</sub> maintenance plan. Nevertheless, we do wish to point out that these same provisions existed within the state air program at the time that EPA approved the SO<sub>2</sub> attainment SIP. Despite the discomfort EPA has with these provisions, Utah has continued to attain and maintain the federal health standards for SO<sub>2</sub>. EPA COMMENT: The State has modeled the emissions from the refineries, and thereby predicted violations of the NAAQS. RESPONSE: This statement is not correct. DAQ has conducted a refined modeling analysis that shows compliance with the SO<sub>2</sub> NAAQS.

Nevertheless, we understand EPA's concerns, and look forward to sharing this information with the Region. EPA COMMENT: EPA was under the impression that the maintenance plan would include a modeling demonstration for the five refineries and would include emission limits for

such. Such an analysis needs to be included in the plan before EPA can re-designate the area to attainment. Additionally, any modeling assumptions would need to be periodically reevaluated, along with the rest of the plan, as per the requirement for verification of continued attainment.

RESPONSE: As we have said all along, the nonattainment situation within Salt Lake County and the eastern portion of Tooele County above 5,600 feet was due to entirely to the emissions from the copper smelter at Kennecott. The federally approved attainment SIP addresses only the Kennecott smelter, and so too should the maintenance plan. The refineries are located sufficiently far away from Kennecott, such that the emissions from these sources are distinct and do not act in an additive way. The refineries have been addressed in a supplemental analysis to see if they could create a separate incidence of SO<sub>2</sub> nonattainment, and the result of the analysis is that they do not cause a violation of any SO<sub>2</sub> standard in Salt Lake County or Davis County; either as separate facilities or as a group. DAQ continues to believe that this information is more appropriately structured as supplemental to a separate maintenance plan, as it does not demonstrate a potential violation of the SO<sub>2</sub> standards. Furthermore, each of the refineries is presently required to comply with federally enforceable SO<sub>2</sub> limits in the Utah SIP, and based on these limits we have one modeling analysis that shows compliance with the PM<sub>10</sub> NAAQS and another analysis that shows compliance with the SO<sub>2</sub> NAAQS. DAQ does not see the value in replicating these emission limits in another portion of the Utah SIP when it is not necessary to ensure the continued protection of the public with respect to either of these health standards. As indicated before, DAQ looks forward to making this analysis available to EPA with the understanding that it is not intended to become part of the SO<sub>2</sub> SIP. EPA COMMENT: In one additional comment from EPA, based on discussions that occurred after the close of the comment period, it was suggested that the maintenance plan would need to address banked emissions.

RESPONSE: While recognizing that the issue of emissions banking is a point of ongoing debate between the DAQ and the EPA, we have inserted some language into Section IX.B.6.c.(1) which essentially states that the emission levels identified therein, which are incorporated into the Utah

SIP at Section IX, Part H (formerly Appendix A to Section IX, Part A) should serve as a baseline for emission rates relied upon by the 1992 SO<sub>2</sub> attainment SIP as well as this maintenance plan. Thus, emission reduction credits would be allowed to the extent that they are established by actual, verifiable, and enforceable reductions in SO<sub>2</sub> emissions below these levels. DAR #27768-9. PM<sub>10</sub> Maintenance Plans for Salt Lake County, Utah County, and Ogden City, and Emission limits for Salt Lake County and Utah County. GENERAL COMMENTS. COMMENT # 1. Under EPA's interpretation of the Clean Air Act, the Natural Events Action Plan for Salt Lake County must be adopted as a SIP revision and submitted to EPA for approval as part of the maintenance plan. {Comment made by the EPA; # A1} Response: The State submitted a Natural Events Action Plan (NEAP) to EPA for review. We have received comments on the plan from EPA, and we are currently reviewing those comments and working with EPA staff to prepare proposed responses to each. It is our intent to have the NEAP finalized prior to EPA's approval of the PM<sub>10</sub> Maintenance Plan. Comment # 2. EPA requests that the State withdraw the February 6, 1996 State Implementation Plan revisions to R307-2-10, Section IX.A.6.f of the SIP, Diesel Inspection and Maintenance (I/M) Program, and Section XXI, Diesel Inspection and Maintenance Program, of the 1996 SIP revision. {Comment made by the EPA; # A2} Response: The original PM<sub>10</sub> SIP included credit for a diesel I/M program that was phased in by Davis, Salt Lake and Utah counties, beginning in 1994. The program was fully implemented by Section XXI, Diesel Inspection and Maintenance Program, which was submitted to EPA in February 1996. EPA has failed to approve that SIP. UDAQ has submitted four separate requests to EPA seeking credit for the Diesel I/M program. We still believe that our justification for credit has been more than adequate, and we again urge EPA to approve the Diesel I/M SIP. Deleting the Diesel I/M SIP would require a separate rulemaking, including a public hearing, because it is incorporated by R307-110-29, and no changes have yet been proposed in that rule. B. SECTION IX.A.10 - PM<sub>10</sub> MAINTENANCE PLAN: DOCUMENT ORGANIZATION: COMMENT # 3. UDAQ has combined 3 different nonattainment areas into one maintenance plan. Generally, EPA cannot partially act on a maintenance plan. UDAQ may want to consider reorganizing the document so that there is a separate maintenance plan and demonstration for each area. {Comment made by the EPA; # A3} RESPONSE: DAQ will reorganize both Part A and Part H such that the Utah Air Quality Board may propose a separate maintenance plan for each of the three areas. There are certain administrative differences in the circumstances surrounding each of these areas, and this should allow EPA more latitude to address these specific concerns. DAQ will also prepare an intermediate copy of both Part A and Part H in order to more clearly show the reader how it addressed each of the comments summarized herein. COMMENT # 4. Does UDAQ intend to retain in the federally approved SIP all of sections IX.A.1 through IX.A.9 (currently Section 9, Part A, 1-9 of the federally approved SIP) in addition to incorporating the maintenance plan into section IX.A.10? {Comment made by the EPA; # B1} RESPONSE: As noted on page 1 of the proposed Maintenance Plan (lines 28-30), the provisions of Section IX.A.1-9 are retained for informational and historic purposes, but are superseded by the new section IX.A.10. UDAQ agrees however that this should be made clear to the reader of sections 1-9, and will therefore propose to clarify this in the table of contents and on the title page at the beginning of Section IX.A. This will not constitute a rulemaking action. In addition, the language on page 1 will be clarified to read as follows: "While the Maintenance Plan could be written to replace all that had come before, it is presented herein as an addendum to Subsections 1-9 in the interest of providing the reader with some sense of historical perspective. Subsections 1-9 are retained for historical purposes, while existing subsection 10 (transportation conformity for Utah County) is herein replaced with a more current evaluation of transportation conformity." COMMENT # 5. (EPA # B2) Section IX.A.10 was approved into Utah's SIP when EPA approved revisions to the Utah County PM<sub>10</sub> SIP, effective January 22, 2003 (67 FR 78181). The existing section is titled Transportation Conformity and consists of language specific to Utah County's PM<sub>10</sub> conformity budgets. Does UDAQ intend for the PM<sub>10</sub> Maintenance Plan to

supersede and replace the existing SIP section? If so, this should be stated. {Comment made by the EPA} RESPONSE: Yes. This was probably an oversight in the numbering of the proposal, but in retrospect it will achieve the desired outcome of retaining, for historical purposes, subsections 1-9 while superceding subsection 10, transportation conformity for Utah County. As proposed, subsection IX.A.10.c(6) is to be the transportation conformity section for Salt Lake and Utah Counties and Ogden City, and will supercede the previously approved (67 FR 78181) Utah County PM<sub>10</sub> section IXA.10 and its MVEBs with a new Transportation Conformity budget defined for 2017 and beyond. The language proposed in the first paragraph of Subsection IX.A.10.c(6)(c) already indicates that the Utah County conformity budgets for 2010 and 2020 that were previously approved by EPA are considered withdrawn. However, DAQ will re-word that sentence as follows to provide additional clarity: "Upon the approval of this Maintenance Plan by EPA, the previously approved Subsection IX.A.10, including Utah County Mobile Source budgets for years 2010 and 2020 will be considered repealed and these new MVEB will take effect for future conformity determinations for 2017 and beyond." The Metropolitan Planning Organization (MPO) for Utah County, Mountainland Association of Governments, supports this approach. MONITORED AIR QUALITY DATA: COMMENT # 6. On page 7, Section IX.A.10.b(1)(a), UDAQ states that expected exceedances are calculated from the (AIRS) data base and that "any data which had been flagged as inappropriate for use in making such determinations, whether concurred with by EPA or not, was not considered here." For two exceedances at Magna in 2001 (causing a NAAQS violation) and exceedances at Ogden No. 2 on July 4, 2002 and July 4, 2003, EPA Region 8 has informed Utah DEQ that no exceptional or natural event flag is applicable or appropriate for these exceedances, and that they may not be excluded from regulatory calculations. These exceedances should be included in the Tables IX.A.30 and IX.A.32 and in the text discussing the exceedance history of Salt Lake County and Ogden City monitors. Similarly, these should be factored into the expected exceedances shown in Tables IX.A.33 and IX.A.35 (on pages 14 and 22 respectively). {Comment made by the EPA; # B5, includes EPA comments B13 and B14} RESPONSE: UDAQ still believes it appropriate to consider only the data which has not been flagged for the purposes of evaluating: 1) whether an area is attaining the NAAQS and 2) determining that the improvement in air quality is due to permanent and enforceable reductions in emissions. These discussions are both prerequisites to redesignation under section 107d of the Clean Air Act. The reason for this is that data is flagged when circumstances indicate that it would represent an outlier in the data set and not be indicative of the entire airshed or the efforts to reasonably mitigate air pollution within. This is anticipated in Appendix N to Part 50 - "Interpretation of the National Ambient Air Quality Standards for Particulate Matter" which says: "Data resulting from uncontrollable or natural events, for example structural fires or high winds, may require special consideration. In some cases, it may be appropriate to exclude these data because they could result in inappropriate values to compare with the levels of the PM standards." Nevertheless, UDAQ received a number of comments on this issue, and will modify the proposed maintenance plan (at sections IX.A.10.b(1) and 10.b.(3)) to more fully explain this. As revised, the plan will also include a discussion of what the data points were that were flagged, and how this would affect the discussions in the plan should EPA eventually conclude that it would not concur with the flags attached by UDAQ. EPA has in fact "not concurred" with the two exceedances measured in Ogden on the 4<sup>th</sup> of July. By contrast, it has only indicated to UDAQ that it intends not to concur with the two exceedances measured at Magna in 2001. Accordingly, Tables IX.A.30 - 35 have been revised to include both sets of data involving the number of expected exceedances predicted for each monitoring station. Discussion is provided for each of the flagged exceedances. The data is also discussed in the context of the annual arithmetic mean concentrations presented in Figures IX.A.28 - 31, Figures IX.A.35 - 37, and IX.A.39. COMMENT # 7. In order to provide full disclosure, the maintenance plan should include all of the PM<sub>10</sub> monitoring data measuring high concentrations for all three nonattainment areas. This would include all exceedances with flagged or otherwise excluded data. The

proposed plan does not provide the public with a clear history of PM<sub>10</sub> concentrations. Specifically, the plan should explain the violation of the 24-hour PM<sub>10</sub> standard in 2001 at the Magna station, which occurred while Kennecott had violated its permit and SIP condition requiring that the tailings pond be covered in water at all times. The State issued an NOV and was supposed to fine Kennecott, but we do not believe this action was taken. Salt Lake County could have been bumped up to a "serious" nonattainment area designation, and the maintenance plan needs to make a full disclosure of this information. In addition, there were 8 other exceedances in the 2002-2004 period, for which DAQ has submitted a Natural Events Action Plan, but EPA has not yet accepted that Plan or the flags on those exceedances to label them exceptional or natural events. Until they do, we have serious doubts as to why Salt Lake County would qualify for a redesignation to attainment. The official public record must accurately reflect the status of PM<sub>10</sub> data in these nonattainment areas. {Comment made by Environmental Defense and Utah Chapter of the Sierra Club} RESPONSE: As discussed in the response to comment # 6 UDAQ will modify the proposed maintenance plan (at sections IX.A.10.b(1) and 10.b.(3)) to more fully explain the data that was flagged, why it was flagged, and how this would affect the discussions in the plan should EPA eventually conclude that it would not concur with the flags attached by UDAQ. As pointed out in the revised plan, almost all of these events have been included in the proposed Natural Events Action Plan (NEAP) as typifying the circumstances under which it would be appropriate to attach a flag to the monitoring data. UDAQ expects that the EPA will concur with these flags when it approves the NEAP. Such concurrence would indicate that, despite regional control measures and mitigative action to address fugitive dust, the wind-speeds were such that it would be unreasonable to expect that high concentrations of blowing dust could have been prevented. Concerning the enforcement action taken against Kennecott: UDAQ required Kennecott to update and submit a comprehensive fugitive dust control that would address the dust problems on April 20, 21, 22, 27, 28, May 2 and 3, 2001. Kennecott's June 7, 1994 fugitive dust plan was deemed inadequate, and the new plan specifically required Kennecott to address the issue of poor trafficability (access) to, and control of all the cells of the tailings impoundment. The NOV was issued on August 10, 2001. Kennecott responded by: updating the old fugitive dust control plan, constructing additional access roads in the reclaim areas, continuing to re-seed the reclaimed cells, and installing additional water irrigation systems to the dry areas. The penalty was lumped into one settlement agreement of \$113,340.00 along with four other violations. \$95,940.00 was paid in cash and \$17,400 was credited to an SEP (green tag power). The tailings penalty by itself was \$70,000.00, and the final agreement date was 1/6/2003. COMMENT # 8. On page 8, Section IX.A.10.b(1)(a), UDAQ states that "the Salt Lake County PM<sub>10</sub> nonattainment area has not exceeded the 24-hour standard since 1992." UDAQ should revise the language to reflect that the Salt Lake County area had a violation at Magna in 2001 and had 8 measured exceedances in 2002-2004 that UDAQ has flagged as natural events. {Comment made by the EPA; # B6} RESPONSE: UDAQ agrees that the language on page 8, Section IX.A.10.b(1)(a), is in error. As revised, the language will read as follows: "Additional information presented in Subsection IX.A10.b(3) shows that the Salt Lake County PM<sub>10</sub> nonattainment area has not violated the 24-hour standard since 1992 nor has it exceeded the annual standard since 1993. It actually attained both standards as of December 31, 1995, and has remained in compliance with the PM<sub>10</sub> NAAQS through 2004." As discussed in the response to comment # 6, UDAQ will modify the proposed maintenance plan (at sections IX.A.10.b(1) and 10.b.(3)) to more fully explain the data that was flagged. See the response to comment #33 for an explanation of the language regarding the annual standard. COMMENT # 9. On page 9, Section IX.A.10.b(1)(a), UDAQ states that "the Utah County PM<sub>10</sub> nonattainment area has not exceeded the 24-hour standard since 1993." UDAQ should revise the language to reflect that the Utah County area has had 2 measured exceedances from 2002-2004 that UDAQ has flagged as natural events. {Comment made by the EPA; # B7} RESPONSE: As discussed in the response to comment # 6, UDAQ will modify the proposed maintenance plan (at sections

IX.A.10.b(1) and 10.b(3)) to more fully explain the data that was flagged. COMMENT # 10. On page 9, Section IX.A.10.b(1)(a), UDAQ states that "the Ogden City PM<sub>10</sub> nonattainment area has not exceeded the 24-hour standard since 1993." UDAQ should revise the language to reflect that the Ogden City area has had 1 measured exceedances that UDAQ flagged as a natural event and 2 measured exceedances that UDAQ flagged as exceptional events, with which EPA has not concurred. {Comment made by the EPA; # B8} RESPONSE: As discussed in the response to comment # 6, UDAQ will modify the proposed maintenance plan (at sections IX.A.10.b(1) and 10.b(3)) to more fully explain the data that was flagged. COMMENT # 11. In Part A, Figures 38 and 39 do not include the monitored data for 2001 - 2004, which included exceedances on July 4, 2003 and 2004, presumably from fireworks at a park near the monitor. Apparently, these data were flagged in a category called "infrequent large gatherings," but EPA has not accepted the flag. Holiday fireworks are regular events and not truly infrequent; the public should be warned that the fireworks are not harmless, and the monitored data should be included in this Plan. {Comment made by Wasatch Clean Air Coalition} RESPONSE: The data monitored in Ogden City on the 4<sup>th</sup> of July (in both 2002 and 2003) is discussed in the revised plan at sections IX.A.10.b(1) and 10.b(3). Therein, UDAQ explains that it does not consider this data to be representative of the entire Ogden area, and that perhaps EPA would have concurred with the flags had there been an existing category (of reasons for such concurrence) that was more appropriate to the actual nature of the events. Nevertheless, UDAQ agrees that the fireworks, in the parking lot where the monitor is located, elevated the particulate concentrations to levels that are considered unhealthy. Since these occurrences, UDAQ has worked with local fire officials to assure that all fireworks in the area are legal and are being used in a manner that will not adversely impact the community. MOBILE VEHICLE EMISSION BUDGETS: COMMENT # 12. (EPA # B30; includes EPA comments # B31 and F3) On page 38, section IX.A.10.c(6), Says that the road dust inventory was discounted by 75% for purposes of demonstrating maintenance, but that it was not discounted for purposes of establishing motor vehicle emissions budgets (MVEBs). Even if this is appropriate, it is not acceptable to use one method to demonstrate maintenance and another to set budgets. Budgets must reflect inventory values used in demonstrating maintenance. {Comment made by the EPA} RESPONSE: The EPA-approved PART5 model provides an approved estimate of road dust emissions. However, particulate precipitation near the road results in only an estimated 25% of road dust reaching the air quality monitors. The justification and citations for the 75% performance adjustment to the air dispersion model are provided in the response to Comment #104. Without the 75% reduction, the air dispersion model would significantly over-predict the primary PM component throughout the modeling domain. Consequently, the projected Mobile Source inventories and budgets appropriately reflect the actual outputs of the PART5 EPA-approved model and were not discounted to support the projected concentrations at the monitoring stations derived from the air dispersion model. This direction is consistent with existing and forthcoming EPA mobile source models. COMMENT # 13. Mobile Source PM<sub>10</sub> Emissions Budgets: Utah County currently has an approved 2003 budget. The 2003 budget will remain in place and must be used in any conformity analysis required for years prior to 2017 unless the state establishes a new revised budget for 2003. Alternatively, Utah could leave the current 2003 budget and establish a 2005 budget. This also pertains to Salt Lake County. There are currently approved budgets for Salt Lake County for 2003 that would apply to years prior to 2015. {Comment made by the EPA; # B33; includes EPA comments # B34} RESPONSE: Anticipating final EPA approval of this plan in 2007, the only budget year required for Transportation Conformity in Utah County is for 2017 and beyond. The response to Comment #5 includes rewording of a sentence in Section IX.A.10.c(6)(c) repealing the Utah County mobile source budgets for 2010 and 2020. The Transportation Conformity Budget years established for Salt Lake County and Ogden City are for 2015 and 2017 and beyond anticipating a positive adequacy determination for transportation conformity purposes in 2005 and a final SIP approval in 2007. The WFRM MPO approve this

strategy. The existing approved budget for 2003 will not be a transportation planning issue subsequent to the EPA approval of this plan. COMMENT # 14. (EPA # B36) In establishing the MVEB for each area, Utah has used a rounding convention (rounding up) that is not consistent with the attainment/maintenance demonstration. This is not appropriate. RESPONSE: When the plan was released for public comment, the MVEB projections for the Alternative 2 MVEBs were rounded up to the nearest whole number. Alternative 2 is no longer included in the plan. The Alternative 1 MVEBs were not rounded up and include the safety margins requested by the MPOs. However, to resolve any confusion over rounding errors, the MVEBs for each area now includes two significant digits to the right of the decimal place. COMMENT # 15. The estimated motor vehicles emissions for each of the three areas in this SIP are the same for both 2015 and 2017. An explanation for why the emissions estimates and associated factors used to calculate the emissions are the same for different years in a rapidly growing metropolitan area must be included. {Comment made by the EPA; # B37} RESPONSE: The 2015 budget was provided in anticipation of a positive mobile adequacy determination for transportation conformity purposes for Salt Lake County and Ogden City later this year (2005). The 2017 and beyond budget is established to provide a ten-year maintenance demonstration in anticipation of a final SIP approval in 2007. The motor vehicle emissions budgets provided for 2015 and 2017 and beyond do not jeopardize the validity of the attainment demonstration and meet transportation conformity requirements through 2030. COMMENT # 16. The public should have the opportunity to comment on the final proposed emission budgets before they are submitted to EPA; the present proposal includes alternatives but it is difficult to tell what the final budgets will be. The budgets that are proposed for 2015 and 2017 should apply in later years as well. The safety margin should remain with the Air Quality Board; it is unlikely that there will be a safety margin in the future and transportation planners should not count on having a higher emissions budget in the future. {Comment made by Environmental Defense and Utah Chapter, Sierra Club} RESPONSE: The Air Quality Board requested comments on two proposals for each pollutant for each geographic area; the AQB will choose from those alternatives. Thus, the final budgets have been available for public comment. By rule, the last year for which mobile source budgets are identified in the plan apply to all future years, so whatever budgets are adopted for 2015 and 2017 will continue to apply in subsequent years. SAFETY MARGIN: COMMENT # 17. (EPA # B32) On pages 38 – 40 of Section IX.A.10.c(6) Mobile Source Budget for Purposes of Conformity for Salt Lake County, text discusses a "safety margin." The safety margin must be expressed in terms of emissions and not ambient concentration. A safety margin expressed in emissions level might correlate to an amount of pollutant concentration but the state must explain what safety margin it is are utilizing in terms of emissions such as tons per day. For example, for Salt Lake County, the State could indicate that the modeling, using 52 tons per day of PM<sub>10</sub> and 35 tons per day of NO<sub>x</sub> mobile source emissions, demonstrates maintenance at 148.5 µg/cubic meter. The State could then state that this shows the safety margin is at least 3.14 tons per day of PM<sub>10</sub> (52 tons per day minus 48.86 tons per day) and 0.04 tons per day of NO<sub>x</sub> (35 tons per day minus 34.96 tons per day), and indicate that it is allocating this portion of the safety margin to the mobile source budgets. This same comment applies to the budget discussion for Utah County and Ogden City. {Comment made by the EPA} RESPONSE: The discussion of the safety margin in this plan is consistent with the discussion provided in the "Mobile Source Technical Support Document for the Utah County PM<sub>10</sub> SIP Revision," dated June 2002 and approved by EPA effective January 22, 2003 (67 FR 78181). CFR 40 Part 93.101 states "Safety margin means the amount by which the total projected emissions from all sources of a given pollutant are less than the total emissions that would satisfy the applicable requirement for reasonable further progress, attainment or maintenance." The MVEB provided for Purposes of Conformity for each area in the plan clearly demonstrates the requested allocation of a portion of the safety margin for the three areas will not exceed the NAAQS for each pollutant throughout the modeling domain. Since the plan uses a dispersion model, expressing the allocation of a portion of the safety margin in

concentration is reasonable. Table XX identifies the allocation of each portion of the safety margin in tons/day for  $PM_{10}$  and  $NO_x$  for each area. However, to provide even greater clarity, UDAQ has added the language suggested by EPA to Section IX.A.10.c(6) to show how the safety margin would be expressed in terms of emissions. The calculation was made for each of the three conformity budgets. COMMENT # 18. (EPA # B38) It appears that no inspection and maintenance (I/M) credit was taken in the mobile source modeling for the projected years. Please include a discussion regarding why this decision was made, a justification behind this decision, and a rationale concluding this decision is appropriate. Please include impacts of modeling a "no I/M" scenario in future years on safety margin and mobile source transportation conformity budgets. {Comment made by the EPA} RESPONSE: The Metropolitan Planning Organizations (Mountainland Association of Governments and Wasatch Front Regional Council) calculated the on-road mobile source emissions for the urbanized areas in the UAM-AERO modeling analysis. The following discussion provides the rationale the MPOs provided for not including the benefits of an I/M program in these calculations: Emissions were calculated with the assumption that the vehicle emissions Inspection and Maintenance (I/M) program implementation may change in the future. This assumption is based on recent state legislation in Utah that has reduced I/M coverage for certain vehicles and model years. Further, as EPA MOBILE models continue to evolve, the emissions credit obtained from I/M programs has significantly decreased, reflecting the benefits derived from advancing vehicle technology and cleaner fuels. The assumption is conservative since most vehicles in the modeling domain fall under the jurisdiction of an I/M program. Therefore, actual vehicle emissions are expected to be lower than projected in the SIP without any I/M controls. The benefits of an I/M program will effectively provide an additional safety margin that should accommodate unanticipated program or demographic changes within the domain. For now, the vehicle emissions inspection is a required part of vehicle registration for most vehicles and will be included in the conformity analysis. I/M programs are currently mandated under the Carbon Monoxide and Ozone SIPs. COMMENT # 19. (EPA # B40) On page 43, lines 32 – 35: UDAQ needs to add language indicating that these values represent the sum of the additions to the motor vehicle emissions inventories for all three areas. It is not clear from the existing text. {Comment made by the EPA} RESPONSE: DAQ agrees, and will clarify the language as follows: "Using the procedure described above, some of the safety margin indicated earlier in Subsection IX.A.10.c(6) has been allocated to the mobile vehicle emissions budgets. The results of this modification are presented below. Inventory: The emissions inventory was adjusted by adding the following sums to the on road mobile source emissions totals for the entire modeling domain: in 2015: 4.04 ton/day  $PM_{10}$  and 0.19 ton/day  $NO_x$ ; in 2017: 5.41 ton/day  $PM_{10}$  and 2.49 ton/day  $NO_x$ ." Note also the revision to the reference in the preceding paragraph, and see response to comment # 53 for explanation. COMMENT # 20. The SIP shows expected concentrations in 2017 and sets motor vehicle emission budgets (MVEB) for 2017. EPA is concerned that when a conformity analysis is performed for the transportation plan for the year 2030 that the estimated motor vehicle emissions will exceed the MVEB, since little or no safety margin is used or available to establish budgets. {Comment made by the EPA; # B35} RESPONSE: The MPOs have reviewed the mobile source emission budgets in the plan for 2017 and believe these budgets are adequate for future conformity determinations for years through 2030 and possibly later years barring unforeseen changes in emission modeling practices as presently constituted. COMMENT # 21. We do not believe there will be any safety margin in the future, and mobile sources should not count on having a higher emissions budget in the future. Any supposed safety margin should remain with the Air Quality Board. {Comment made by Sierra Club, Utah Chapter} RESPONSE: The evaluation of a safety margin is documented in the plan. The magnitude of the safety margin is based on the best available emission projections and airshed modeling. Allocation of a portion of the safety margin to Mobile Sources is within the discretion of the Utah Air Quality Board, and UDAQ staff will recommend that the Board advance the Maintenance Plan including Alternative 1 as the final set of mobile vehicle emission



budgets. COMMENT # 22. UDOT supports the "Alternative 1" analysis method, which sets the direct PM<sub>10</sub> and NO<sub>x</sub> mobile vehicle emission budget for 2025 and 2017 in Salt Lake County, Ogden City and Utah County. UDOT understands that the new budgets for Salt Lake County and Ogden City can be used for conformity as soon as the EPA conducts its adequacy review and publishes a positive finding in the Federal Register; for Utah County, the previously approved Utah County Mobile Source budgets for 2010 and 2020 remain in place until EPA approves the Maintenance Plan. {Comment made by the Utah Department of Transportation} RESPONSE: See response to comment # 21. COMMENT # 23. We recommend that the Air Quality Board adopt Alternative 1 mobile source emissions budgets for Salt Lake County and Ogden City. WFRRC is committed to manage mobile source emissions at a level below the emissions budget proposed. {Comment made by the Wasatch Front Regional Council} RESPONSE: See response to comment # 21. COMMENT # 24. We request that the Air Quality Board approve the Utah County mobile source emission budget of 21 tpd of NO<sub>x</sub> and 25 tpd of direct PM<sub>10</sub> for the year 2017 and beyond. This will allow a small safety margin that will allow us to maintain continuous conformity with low levels of PM<sub>10</sub> throughout the life of the Plan. Utah County's population is expected to more than double in the next 30 years; a robust transportation system is required for the transport of goods, worker commutes, tourism and access to all aspects of a healthy society. The safety margin we request can be compared with the margin that stationary source industries have in being permitted for allowable emissions, instead of actual emissions; Table 37 in the Plan shows the difference between allowable and actual emissions. {Comment made by the Mountainland Association of Governments} RESPONSE: See response to comment # 21. COMMENT # 25. While the public notice indicates that the Board requests comment on whether or not to allocate part of the safety margin to the motor vehicle emissions budget, the language of Plan (IX.A.10.c(6)) indicates that, should the modeling results *show that the area would still be maintaining the PM<sub>10</sub> standard using the expanded MVEB, Alternative 1* [that is, allocation of the safety margin to the MVEB] *would be included*. We believe the Board should retain discretion over any safety margin that might be realized rather than committing it irrevocably to the MVEB or any other particular emissions budget. It is impossible to determine today what will be the best use of any such safety margin for 10 or more years into the future. {Comment made by UIENC and endorsed by Kennecott} RESPONSE: See response to comment # 21. EMISSION REDUCTION CREDITS: COMMENT # 26. On page 37, section IX.A.10.c(4), "Emission Reduction Credits": The intent and meaning of this section is unclear. The text should define Emission Reduction Credits and describe how they were included in the modeling. Also, the second sentence of the text may not be consistent with proper principles for banking emissions. What is the significance of establishing a "baseline for the emission rates relied on" by the maintenance plan? What is the intent of the third sentence? What emission reduction credits is it referring to, and for what purpose are they allowed? Finally, we question whether this statement is adequate to ensure that relevant criteria are met for use of banked emissions for offsets or other purposes. We require that banked emissions be surplus (can't be required to meet another requirement), permanent, and quantifiable. We would expect any valid provision regarding banking of emissions to define relevant terms such as "actual," "quantifiable," "enforceable," "permanent," and "surplus," as well as to adequately describe the process for banking and tracking the use of banked emissions. {Comment made by the EPA; # B27} RESPONSE: The PM<sub>10</sub> maintenance plan uses the term "baseline for the emission rates relied upon by this maintenance plan" in accordance with Section 173(a)(1) of the Clean Air Act that establishes the permitting requirements for nonattainment areas: "173(a) ... (1) in accordance with regulations issued by the Administrator for the determination of baseline emissions in a manner consistent with the assumptions underlying the applicable implementation plan approved under section 110 and this part, the permitting agency determines that --(A) by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained..." The baseline for the SIP is also referred to in 40 CFR Part 51, Appendix S and in EPA's 1986



Emissions Trading Policy Statement. The purpose of this section of the maintenance plan is to establish that the registry of existing emission reduction credits was included in the modeling demonstration for the PM<sub>10</sub> maintenance plan. The PM<sub>10</sub> maintenance plan refers to "Existing Emission Reduction Credits on file with the UDAQ." UDAQ maintains a registry of emission reduction credits, and all of the registered credits for PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> were included in the modeling analysis as banked emissions. The PM<sub>10</sub> maintenance plan does not establish the requirements and procedures for using or banking emission offset credits. R307-403 establishes the requirements for permitting of new major sources and major modifications in the PM<sub>10</sub> nonattainment area, including the banking provisions and requirements that emissions offsets must meet before they could be used in the permitting process. UDAQ is implementing and enforcing this rule in accordance with EPA's interpretation of the rule in the May 5, 1995 approval of Utah's nonattainment NSR rules (FR Vol. 60, No. 87, pages 22277 - 22283). The registry is provided to facilitate the negotiations of sources that are seeking to use the credits.

COMMENT # 27. Kennecott interprets the language on pages 35 and 37, as well as the language in the rules, to preserve the existing Emission Reduction Credits (ERCs) as well as the existing system for banking ERCs from emission reduction for use as offsets in the future. We ask the Division to confirm this interpretation. {Comment made by Kennecott} RESPONSE: The emission reduction credits in Utah's registry were included in the modeling for the maintenance plan to preserve these credits in the baseline for the SIP. The PM<sub>10</sub> maintenance plan does not establish the requirements and procedures for using or banking emission offset credits. R307-403 establishes the requirements for permitting of new major sources and major modifications in the PM<sub>10</sub> nonattainment area, including the banking provisions and requirements that emissions offsets must meet before they could be used in the permitting process. UDAQ is implementing and enforcing this rule in accordance with EPA's interpretation of the rule in the May 5, 1995 approval of Utah's nonattainment NSR rules (FR Vol. 60, No. 87, pages 22277 - 22283). The registry is provided to facilitate the negotiations of sources that are seeking to use the credits.

COMMENT # 28. The proposed Plan and rules do not indicate any changes in the provisions for emission reduction credit. We request confirmation of this, or an explanation of what changes are expected as a result of this Plan. {Comment made by UIENC} RESPONSE: The commenter is correct that the maintenance plan does not change any provisions for emissions offset credits. The requirements for the use of emissions offset credits in nonattainment areas are found in R307-403. A new rule that was proposed to support the goals of the maintenance plan will maintain the offset provisions for SO<sub>2</sub> and NO<sub>x</sub> in Salt Lake and Utah Counties when these areas are redesignated to attainment. The new rule relies on the process and procedures established in R307-403 for establishing and using emission offset credits. CONTINGENCY MEASURES:

COMMENT # 29. On page 45, line 19, Section IX.A.10.c(10), "Contingency Measures": Per section 175A(d) of the CAA, you must list as potential contingency measures any requirements removed from the SIP for the area. This includes any stationary source limits and requirements that are being removed from the SIP for Salt Lake or Utah Counties. These need not be individually identified. Instead, it can refer to all stationary source requirements that were in effect before adoption of new section IX.H. {Comment made by the EPA; # B42} RESPONSE: Utah is not removing provisions from the SIP that were needed to attain the standard but are no longer needed to maintain the standard. Instead, Utah is redefining RACM to focus on those emission units that have a significant impact on PM<sub>10</sub> levels. The effectiveness of the RACM controls will not change, and the SIP will be more functional. Part H of the SIP will be submitted to EPA as a SIP revision, not as part of the maintenance plan. When the Utah PM<sub>10</sub> SIP was developed in the late 1980's and early 1990's detailed requirements for stationary sources were included in the SIP without understanding the future implications. These details were not necessary to establish RACM in the SIP because it was the larger emission units that affected the modeling demonstration. The level of detail quickly became unmanageable because even minor changes required a SIP revision, and the early SIP revisions that were sent to EPA were never

approved. In 2002 the State of Utah submitted a PM<sub>10</sub> SIP revision that addressed this problem for stationary sources in Utah County. The SIP was focused on the larger emission units, and the level of detail was reduced. The requirements for smaller sources and smaller emission units were moved to approval orders for the sources, and any future changes to those sources will be subject to the permitting requirements in R307-401, R307-403, or R307-405 (BACT or LAER will be required). EPA approved the SIP revision on December 23, 2002, in part because the revised RACM determination was still valid. The proposed revisions to Part H follow the same approach that was used in the 2002 revision to the SIP. Section 175A of the Act requires the maintenance plan to "include a requirement that the State will implement all measures with respect to the control of the air pollutant concerned which were contained in the State implementation plan for the area before redesignation of the area as an attainment area." UDAQ anticipates that EPA will approve the revision to Part H prior to, or concurrently with the approval of the maintenance plan. Therefore, the revised RACM determination would be part of the SIP at the time of approval. In the future, if Utah determines that RACM is no longer required to demonstrate attainment or maintenance, it would be appropriate to place the RACM requirements in the SIP as contingency measures. COMMENT # 30. Any control measure removed from the nonattainment SIP must be included in the maintenance plan as a possible contingency measure. Therefore, Utah should include all the control measures that are proposed for removal, such as the more inclusive stationary source requirements that were included in the original SIP. Utah should consider removing or suspending the use of banked emissions if contingency measures are necessary. The state's banking registry includes large amounts of banked PM, SO<sub>2</sub>, and NO<sub>x</sub> emissions that could cause problems if these emissions are bought and used by new or expanding sources. {Comment made by Environmental Defense and Utah Chapter, Sierra Club} RESPONSE: The response to comment #29 addresses the issue of including old SIP requirements as contingency measures. The modeling demonstration included all of the PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> emissions that are included in the registry, and still showed attainment. In addition, when the area is redesignated to attainment for PM<sub>10</sub>, the PSD permitting program and the state permitting program will require an impact analysis for new or modified stationary sources to ensure that the NAAQS is maintained. However, if there are future violations of the PM<sub>10</sub> NAAQS, section IX.A.10.c of the plan contains contingency measures that will be considered to address the problem, including further controls on stationary sources. The controls selected will depend on the nature of the violation. A summertime dust problem would require a different solution than a wintertime inversion problem. If the violation is attributed to growth of new sources then changes to the offset provision, such as increasing the offset ratio for PM<sub>10</sub> or one of its precursors, may be an option. This approach has already been used as a proactive measure to control the growth of VOC sources in the ozone maintenance area. These types of decisions will be made, as described in section IX.A.10.c of the plan if a future violation of the PM<sub>10</sub> standard occurs. CLARIFICATIONS & CORRECTIONS: COMMENT # 31. On page 2, section IX.A.10.a(2), there is a typo in the first paragraph. It states "On February 3, 1995, Utah submittal amendments . . ." which should read "On February 3, 1995, Utah submitted amendments . . ." {Comment made by the EPA; # B3} RESPONSE: UDAQ agrees, and will make the appropriate revision. COMMENT # 32. The discussion of the Magna monitoring station on page 4 says, "It is largely impacted (at times) by blowing dust from a large tailings impoundment..." We believe this clause should be put in the past tense, because the South Impoundment is no longer in use and has been reclaimed, with vegetation on all but a few hundred acres that are either saturated or under water. It is no longer a source of significant dust, and the North Impoundment is well controlled. We suggest adding a broken vertical line to Figure IX.A.26 between 1988 and 1989 with a caption to indicate the implementation of the new dust controls. {Comment made by Kennecott} RESPONSE: The discussion, on page 11 (not page 4), concerns the network of air quality monitors and the siting of individual monitors within the context of the network. The PM<sub>10</sub> monitor at Magna is described as being located in a

suburban residential area and as being largely impacted (at times) by blowing dust from a large tailings impoundment. It is certainly true that improvements have been made at the tailings impoundment, but when wind speeds become excessive the monitor at Magna is still sensitive to windblown dust from the impoundment. This is evidenced by several exceedances recorded in 2001, 2002 and 2003 (see discussions at Comments no. 6, 7 and 8). UDAQ believes the text on page 11 accurately characterizes the significance of a PM<sub>10</sub> monitor at Magna. COMMENT # 33. In Part A, page 8, lines 8-11, the text should be modified to address the annual standard in Salt Lake County. {Comment made by Kennecott} RESPONSE: UDAQ concurs with this suggestion, and will propose additional text as indicated, to read as follows: "Additional information presented in Subsection IX.A.10.b(3) shows that the Salt Lake County PM<sub>10</sub> nonattainment area has not violated the 24-hour standard since 1992, nor has it exceeded the annual standard since 1993. It actually attained both standards as of December 31, 1995, and has remained in compliance with the PM<sub>10</sub> NAAQS through 2004." See the response to comment #8 for an explanation of the language regarding the 24-hour standard. COMMENT # 34. In SIP IX.A.10, on page 12 in line 42, there is a reference to IX.A.10.a(1)(iv). There is no such citation; it should be IX.A.10.a(1)(4). {Comment made by Wasatch Clean Air Coalition} RESPONSE: UDAQ agrees, and will make the appropriate revision, which should be IX.A.10.a(4). COMMENT # 35. On page 12, section IX.A.10.b(1)(d), "EPA Acknowledgement": The relevant discussion is not whether EPA previously determined that the areas (Salt Lake and Utah counties) were attaining, but whether they are currently attaining the standard. {Comment made by the EPA; # B10} RESPONSE: Section IX.A.10.b(1)(d) follows sections IX.A.10.b(1) (a) through (c) which do in fact address the question of whether all three areas (Salt Lake and Utah Counties and Ogden City) are currently attaining the standard using the most recent three years of quality assured air quality data. Given however that the language of CAA 107(d)(3)(E)(i) "The Administrator determines that the area has attained the national ambient air quality standard" is in the past tense, the discussion presented in Section IX.A.10.b(1)(d) seems relevant as well. COMMENT # 36. On page 12, section IX.A.10.b(1)(c), lines 9 - 12: The State should describe how modeling indicates that the areas are attaining the standard today, not how modeling shows the areas will maintain the standard through 2017. The latter is the maintenance demonstration, a separate requirement. {Comment made by the EPA; # B9} RESPONSE: The span of the modeling analysis, conducted as part of the maintenance plan, covers the years 2005 through 2017. UDAQ will add clarification language to read as follows(beginning on line 11): "It shows that all three nonattainment areas are presently in compliance, and will continue to comply with the PM<sub>10</sub> NAAQS through the year 2017." COMMENT # 37. On page 12, section IX.A.10.b(2), EPA suggests that this section should mention the recent revision to the Salt Lake SIP that established different budgets for conformity. {Comment made by the EPA; # B11} RESPONSE: This comment refers to R307-310 that permitted limited trading between the PM<sub>10</sub> and NOx budgets derived from the existing PM<sub>10</sub> SIP for Salt Lake County. However, as part of the PM<sub>10</sub> Maintenance Plan, a new section R307-310-5 is being added that keeps the R307-310 in effect until the day that EPA approves the conformity budget in the PM<sub>10</sub> Maintenance Plan. Therefore, this flexibility will no longer be permitted, and it is not necessary to provide any further clarification. COMMENT # 38. On page 13, section IX.A.10.b(3)(a) and on page 27, section IX.A.10.b(3)(b)(III), UDAQ points out that Ogden City began implementing a voluntary woodburning program. Voluntary measures are not considered in the request for redesignation because such measures are not permanent and enforceable. {Comment made by the EPA; #s B12 and B15} RESPONSE: UDAQ understands that voluntary measures are not creditable. Nevertheless, the effect of the program is likely reflected to some degree, along with other creditable measures, in the ambient air quality data trends, and that is why it was mentioned. However, since the point of the exercise is to reasonably attribute the improvement in air quality to emission reductions that are permanent and enforceable, UDAQ will simply strike the language to avoid any confusion. On page 13, section IX.A.10.b(3)(a), the change will read as follows:

"In the case of Ogden City, there were a number of control measures incorporated into the Utah SIP on either a state-wide basis or as applicable to nonattainment areas in general. As discussed in Subsection IX.A.10.a(1) above, these measures were at least partly responsible for bringing the area into compliance with the PM<sub>10</sub> NAAQS. The introduction of these measures (open burning rule, visible emissions rule, fugitive dust rule, and vehicle I/M) was not so abrupt as was the case in the other two nonattainment areas, but Vehicle I/M did begin in 1990 which is relatively coincident with the peak of measured concentrations for the area. Its effectiveness is seen in all subsequent years." On page 27, section IX.A.10.b(3)(b)(III), the following text will be deleted: "[In addition, Ogden began participating in the woodburning program on a voluntarily basis during the winter of 1993.]" COMMENT # 39. On page 14, the text should be corrected to say that the standard has not been VIOLATED since 1992, as there have been exceedances since then. {Comment made by Kennecott} RESPONSE: UDAQ presumes this comment to actually pertain to the discussion on page 8, lines 8-11. As such, see discussion under Comment # 8.

COMMENT # 40. On page 27, section IX.A.10.b(4), pertaining to section 110 of the CAA and Part D requirements, the text doesn't address part D requirements. UDAQ should include some discussion regarding the nonattainment area SIPs. For Ogden, this would probably be a statement regarding anticipated EPA approval....Also, under this same section, last sentence located at the top of page 28, UDAQ has confused the citations of EPA's federal register actions dated March 9, 2001 and August 15, 1984. EPA suggests changing this sentence to read as follows: "For further detail, see 45 FR 32575 dated August 15, 1984 (Volume 49, No. 159) or 66 FR 14079 dated March 9, 2001 (Volume 66, No. 47)." {Comment made by the EPA; # B16} RESPONSE: UDAQ agrees, and will add the following language to the end of section IX.A.10.b(4): "Part D of the Clean Air Act addresses "Plan Requirements for Nonattainment Areas." One of the pre-conditions for a maintenance plan is a fully approved attainment plan for the area. This is also discussed in section IX.A.10.b(2). For Salt Lake County, the Part D requirements for PM<sub>10</sub> were addressed in an attainment SIP approved by EPA on July 8, 1994 (59 FR 35036). For Utah County, the Part D requirements for PM<sub>10</sub> were most recently addressed in an attainment SIP approved by EPA on December 23, 2002 (67 FR 78181). For Ogden City, it is anticipated that the Part D requirements for PM<sub>10</sub> will be found to have been satisfied via EPA's Clean Data Areas Approach (October 18, 1999)." UDAQ will also correct the incorrect Federal Register citation identified in the comment.

COMMENT # 41. The data for the "Ogden2" monitor that replaced Ogden1-49-057-0001 is not shown in graphs in Section IX.A.10.b(3). {Comment made by the EPA; # B17} RESPONSE: Section IX.A.10.b(3) of the proposed maintenance plan addresses the role of emissions reductions in the observed improvement in air quality. Ambient data has only been collected at the Ogden2 site since the summer of 2001, and it was thought that this was too short a time span to reveal any significant trends. Nevertheless, the data from Ogden2 could be combined with the data from Ogden1 in the charts that are shown as Figures IX.A.38 and 39. Some text will also be provided in section IX.A.10.b(3)(a) to explain as much.

COMMENT # 42. On page 27, section IX.A.10.b(4), pertaining to section 110 of the CAA and Part D requirements, UDAQ needs to include a discussion of how they've addressed the commitments that were made to EPA by UDAQ in a letter dated April 18, 2002 and included in EPA's federal register action approving revisions to the Utah County SIP, dated December 23, 2002 (67 FR 78181). {Comment made by the EPA; # B18} RESPONSE: UDAQ agrees that this information is pertinent to the discussion of the proposed PM<sub>10</sub> maintenance plan. However the commitments made in the above referenced letter are neither section 110 requirements nor Part D requirements, and should not be included in the maintenance plan.

COMMENT # 43. On page 30, section IX.A.10.c(a), under Meteorological data: The discussion is not clear. An average reader will be unable to understand the chronology and the importance of the discussion. {Comment made by the EPA; # B19} RESPONSE: In order to provide more information to the average reader, the following text from the TSD will replace the text presently found in section IX.A.10.c(a): "(a) Meteorological data. Recent UDAQ meteorological modeling projects using

advanced "state of the science" prognostic meteorological models have proven unsuccessful in simulating highly variable Wasatch Front meteorology during inversion conditions. These problems led UDAQ to choose a diagnostic meteorological model called the Diagnostic Wind Model (DWM) model for the January 2001 and February 2002 episodes to avert many of the past modeling problems. The DWM assimilates actual observations of wind speed and direction to diagnose and construct a consistent wind field. UDAQ embarked on a 4-phase modeling approach in order to develop the most realistic wind fields possible. Each phase of the 4-phase modeling approach utilized unique combinations of observed meteorological data for each analysis. Each of the 4 phases is described below: Phase 1. The DWM model was run utilizing 60-100 surface observing stations, two radiosondes, and two SODARs per day. The surface station data was taken from the University of Utah MESOWEST database and included a wide variety of station types. Phase 1 of modeling utilized only surface stations with an elevation of 5,500ft or lower. The National Weather Service Salt Lake City radiosonde data was used along with two UDAQ SODAR units operated in Utah and Salt Lake valleys. It was thought that the multitude of available data would allow DWM to produce representative wind fields. UAM-AERO results showed modeled  $PM_{10}$  values that were only 40-50% of the observed values. Model output evaluation showed that  $PM_{10}$  was being advected out of the Salt Lake Valley (SLV) and the model domain to the SE. Afternoon up-valley NW winds moved  $PM_{10}$  into the mountains to the SE of the SLV. At night, winds became light and variable at most surface stations and as a result were unable to return the  $PM_{10}$  back to the SLV. Additionally, UDAQ's hypothesized benefit of having a multitude of surface stations actually induced unrealistic vertical motions due to surface convergence of widely varying wind directions. Phase 2. The failings of phase 1 encouraged UDAQ to be more selective of the surface stations used in DWM. First, the Salt Lake Valley SODAR was discarded due to observations that were incongruent with the Utah Valley SODAR and the Salt Lake City radiosonde. Second, UDAQ selected only the UDAQ operated surface stations. These surface stations are situated in strategic locations across the Wasatch Front. 11 UDAQ stations were used. The phase 2 hypothesis was that the more selective set of surface stations might produce a wind field with less convergence and resultant vertical motions. UDAQ found that the phase 2 wind fields produce periods of daytime NW winds that advected pollutants out of the SLV. The nocturnal and morning winds were light and variable and were unable to return the pollutants to the SLV. Most of the observations within the SLV show a trend of daytime up-valley flow and nighttime weak variable flow. In reality, the daytime flow re-circulates within the boundaries of the inversion but in UAM-AERO the continuous grid network cannot retain the flow within the open sided grid cells of the SLV. Phase 3. Phase 2 results showed transport of  $PM_{10}$  out of the SLV. Model evaluation clearly showed a direct link with the observation wind direction and speeds. Phase 3 tested the possibility that a single station located in SLV might produce a wind field that has a more even distribution of wind direction and speeds. In other words, is there a station in SLV that is representative of the valley but where daytime winds and nighttime winds balance each other? If so, developing a wind field from a single station may reduce advection out of the SLV. Three separate wind fields were developed in phase 3. These wind fields utilized the centrally located and well sited UDAQ Hawthorne and West Valley monitors as well as another well sited but southeasterly located UDAQ Cottonwood station. The results of phase 3 modeling again showed advection out of the SLV and the domain. Stronger daytime NW winds compared to nighttime light and variable winds again forced the loss of  $PM_{10}$ . b) Phase 4. Phases 1-3 clearly demonstrated the inability of the DWM model to accurately represent the conceptual understanding of inversion conditions. The model deficiencies arise from the model grid-cell structure. The model grid cells are continuous and are unable to "trap" or contain air within an inversion layer. The real wind observations in the SLV do have advective properties that would allow the pollutants to move beyond the boundaries of the SLV under non-inversion conditions. However, under inversion conditions the advective properties of the real wind observations are

negated by a forced recirculation of air within the inversion layer by the containing boundaries of the inversion. In phase 4, a purely idealized flow was created in the attempt to retain pollutants in the SLV. A bimodal wind direction field was created using an afternoon NW wind (330) and an evening, night, and morning SE wind (140). These directions correspond to daytime up-valley flow and nighttime down-valley flow. Wind speeds were chosen so that advection was limited to within the boundaries of the SLV. This wind field, while idealized, fits the conceptual understanding of inversion conditions. Phase 4 modeling retains  $PM_{10}$  within the SLV and UAM-AERO  $PM_{10}$  results show excellent agreement with the observations." COMMENT # 44.

Ambient Air at Kennecott Mine and Copperton Concentrator – The text on page 31, section IX.A.10.c(1)(c), notes that a  $PM_{10}$  NAAQS violation was modeled on a 4 km grid cell that was fully contained on Kennecott's property boundary and therefore the grid cell cannot be considered ambient air. In order to be excluded from consideration as ambient air, public access would need to be precluded by means of a fence or other barrier (such as posting "No Trespassing" signs and security guards). Also any leased property within the Kennecott compound would normally be considered ambient air. The plan language should address these requirements. {Comment made by the EPA; # B20} RESPONSE: According to officials of KUCC, the mine has a centralized access point for entrance to the Mine operations which is manned by security personnel, 24 hours a day, 7 days a week, 365 days a year. Industrial grade fencing is utilized to prevent unauthorized entry to all Kennecott plants and operations. No trespassing signs are posted on the fences and additional security supervisory patrol is mobile 24 hours a day, 7 days a week to monitor the fence line. Security is aided by the use of closed circuit TV in certain areas to monitor unauthorized activity. COMMENT # 45. Part A, page 36, discusses concentrations greater than  $150 \mu/m^3$  that were predicted in two grid cells on KUCC property. We understand that one cell was in the Bingham Canyon mine pit and the other was just north of the pit. The general public does not have access to this area and thus these two grid cells do not represent ambient air. In addition, one cell was in an emission source and the other adjacent to the source. For these reasons, these were inappropriate locations for receptors in a modeling demonstration. {Comment made by Kennecott} RESPONSE: UDAQ agrees that the two grid cells do not represent ambient air. In a grid-based model ambient concentration are not estimated at receptors but rather each grid cell centroid reports hourly concentrations. Therefore, all of the cells in the modeling domain have estimated concentration whether they have emissions sources located within them or not. COMMENT # 46. On page 34, section IX.A.10.c(1)(d), paragraph at the top of the page, 2<sup>nd</sup> and 3<sup>rd</sup> sentence – These sentences suggest that no new control strategies are needed because the 1991 strategies were sufficient to achieve compliance with the 24-hour and annual standards. This misconstrues the point of the maintenance demonstration. It's only because the area can continue to maintain the standard throughout the maintenance period without new control measures that no new measures are needed, not because the area has been meeting the standards with current measures. {Comment made by the EPA; # B21} RESPONSE: Section IX.A.10.c(1)(d) addresses the demonstration of maintenance with respect to the annual standard for  $PM_{10}$ . UDAQ acknowledges that the point of the exercise is to demonstrate that a suite of controls is, and will be, sufficient to achieve compliance with the NAAQS. In the case of the annual standard, one follows the other. In other words, because the suite of controls developed to address the 24-hr standard has also proven effective, as assumed, in controlling for the annual standard, we are able to conclude that this assumption was in fact valid. This means that the same assumption may be carried forward into the proposed maintenance plan, which is significant because the UAM-AERO model is built only to assess the 24-hr standard under stagnant wintertime conditions. Since the UAM-AERO analysis models essentially the same suite of controls modeled in the previous CMB analyses, it can therefore be said that this modeling analysis also shows compliance with the annual standard through the year 2017. COMMENT # 47. On page 34, section IX.A.10.c(1)(d), second paragraph at the top of the page – UDAQ should include text stating that you expect the Ogden area to continue to maintain the

annual standard and explain the basis for this expectation. {Comment made by the EPA; # B22} RESPONSE: The existing language will be expanded upon to read as follows: "The annual  $PM_{10}$  standard was never violated in Ogden City. In fact the highest single value ever recorded (37.6 ug/m<sup>3</sup> in 1991) was only 75% of the standard. Furthermore, as shown in Figure IX.A.39, the general trend in the annual arithmetic mean concentrations observed since 1986 is downward. As explained in section IX.A.10.b(3)(b)(iii), this trend is reflective of permanent and enforceable control measures that were incorporated into the Utah SIP. The continued implementation of these control measures provides a reliable indication that the annual mean concentrations of  $PM_{10}$  will remain well within the standard of 50 ug/m<sup>3</sup>." COMMENT # 48. On page 34, section IX.A.10.c(2), last sentence on this page – UDAQ needs to be specific about what bordering region is included in the modeling domain. {Comment made by the EPA; # B23} RESPONSE: UDAQ will add a cross reference to the graphical picture of the modeling domain, which indicates all county boundaries and nonattainment areas, to read as follows: "The modeling domain encompasses all three areas within the state that were designated as nonattainment areas for  $PM_{10}$ : Salt Lake County, Utah County, and Ogden City, as well as a bordering region see Figure IX.A.23." COMMENT # 49. On page 36, section IX.A.10.c(3), line 16 – The text says, "as determined on a short-term basis." UDAQ needs to be specific about the time-frame; e.g., "as determined on a 24-hour basis." {Comment made by the EPA; # B24} RESPONSE: UDAQ will change as follows to clarify: "The larger sources within the modeling domain were modeled at their maximum allowable emissions, as determined on a 24-hour basis." Comment # 50. On page 37, section IX.A.10.c(3), line 11 – This statement should include a cross-reference to the section of the maintenance plan that describes the maintenance demonstration. {Comment made by the EPA; # B26} RESPONSE: UDAQ will modify the language on page 37 to read as follows: "These conditions demonstrate maintenance through 2017 see subsections IX.A.10.c.(1) and (2)." COMMENT # 51. On page 37, section IX.A.10.c(5), line 29 – The text refers to "these emission limitations." UDAQ needs to specify which limits it is referring to. {Comment made by the EPA; # B28} RESPONSE: UDAQ will modify the language on page 37 to read as follows: "Since the emission limitations discussed in subsection IX.A.10.c(3) remain federally enforceable and have been sufficient to ensure continued attainment of the  $PM_{10}$  NAAQS, there is no need to require any additional control measures to maintain the  $PM_{10}$  NAAQS." COMMENT # 52. On page 37, section IX.A.10.c(5), lines 29 – 31: Use of the past tense - "have been sufficient" - is inappropriate. Change to read, "Since the emissions limitations contained in section \_\_\_\_ of the SIP remain federally enforceable and are sufficient to ensure continued attainment of the  $PM_{10}$  NAAQS [cross-reference maintenance plan section that describes the maintenance demonstration], there is no need ..." {Comment made by the EPA; # B29} RESPONSE: UDAQ agrees, and will revise the text to read as follows: "Since the emission limitations discussed in subsection IX.A.10.c(3) remain federally enforceable and, as demonstrated in IX.A.10.c(1) above, are sufficient to ensure continued attainment of the  $PM_{10}$  NAAQS, there is no need to require any additional control measures to maintain the  $PM_{10}$  NAAQS." COMMENT # 53. On page 43, line 29, reference to IX.A.10.c(1) – Should this be IX.A.10.c(6)? {Comment made by the EPA; # B39} RESPONSE: UDAQ agrees, and will make the appropriate revision. COMMENT # 54. On page 45, line 8, Section IX.A.10.c(9) – there is a spelling error. {Comment made by the EPA; # B41} RESPONSE: UDAQ agrees, and will make the appropriate revision. SECTION IX. PART H – EMISSION LIMITS AND OPERATING PRACTICES: GENERAL COMMENTS: COMMENT # 55. (EPA # C general 1) The State is proposing to remove various sources and numerous requirements from existing section IX.H. One overarching concern is that the proposed changes are so extensive that they will render the source-specific provisions unenforceable. We're also concerned that the remaining emissions limits and other requirements may not be consistent with the maintenance demonstration. The prior SIP had far more detailed compliance determining provisions. Another



very significant and related concern is that the proposed changes, even if they could be found to be consistent with maintenance of the  $PM_{10}$  NAAQS, may negatively impact other NAAQS and CAA requirements. Based on interpretations of section 110(l) that EPA has recently expressed in letters, and anticipated guidance that EPA is drafting, we would like to advise the State that before we could approve the proposed changes, the State would need to demonstrate (possibly through modeling) that the changes would not interfere with attainment, maintenance, or any other applicable requirements of the CAA, not just for  $PM_{10}$ , but for other pollutants as well, including  $SO_2$ ,  $PM_{2.5}$ , and ozone. The potential impact on PSD increments is also a concern and would have to be addressed in a demonstration of noninterference. Due to time constraints, we cannot detail every issue related to 110(l) in this letter. Instead, it is essential that the State provide an adequate demonstration for all the proposed changes. {Comment made by the EPA}

RESPONSE: a) The emission limitations in Part H are enforceable. R307-305-4 requires all sources with emission limitations in Part H of the SIP to comply with those emission limitations. All of the source-specific requirements that were not needed to meet the RACM requirement have not gone away. They are included in federally-enforceable approval orders for the affected sources. Any changes at those sources have occurred through Utah's NSR process and have required LAER (BACT for non-major sources) and emissions offsets to compensate for any emission increase. All of the emission limitations in the SIP and the approval orders are subject to Title V permitting requirements for affected sources, further ensuring the enforceability of the underlying requirements. b) The emission limits are consistent with the modeling demonstration. The larger sources were modeled based on their maximum emission rates because these sources are large enough to individually affect the attainment demonstration. If the individual source operated at the maximum level it could affect the NAAQS. The emission limits for these large sources are included in Part H of the SIP. The projection inventories for these sources may be found at section (3)(b)(iii) of the TSD (see also the response to comment #99 and #105). The smaller sources were modeled based on their actual emission rate because they contribute more to the background level of  $PM_{10}$  rather than affecting the attainment demonstration as a single source. If a small source was operating at its maximum level it would not significantly affect  $PM_{10}$  levels and most likely another source would be operating at a reduced level to counteract the impact on background levels in the attainment demonstration. c) It is difficult to respond to a comment regarding EPA guidance that has not yet been released. UDAQ staff has not developed this maintenance plan in a vacuum without consideration of the effect of this plan on other pollutants. UDAQ is currently working on a revised ozone maintenance plan for ozone (due in April 2007) to demonstrate that Salt Lake and Davis Counties will continue to meet the 8-hour ozone NAAQS. Current ozone monitoring data show on-going improvement in ozone levels in the area. Preliminary inventory numbers for that plan show that  $NO_x$  emissions in the maintenance area will be declining significantly over the next 10 years as more vehicles meet the Tier 2 emissions standards. The State of Utah submitted an  $SO_2$  maintenance plan in January of this year that was developed concurrently with the  $PM_{10}$  maintenance plan and that showed maintenance of the standard for the next 10 years. Current monitored values of  $SO_2$  are less than a  $10^{th}$  of the standard. Utah also just submitted a regional haze SIP in December 2003 that addressed visibility-impairing pollutants in the state through the year 2018. The pollutant that is of most concern to UDAQ at this point in time is  $PM_{2.5}$ . The good news is that the control strategies in the both the 1981 TSP SIP for the Wasatch Front, and the 1992  $PM_{10}$  SIP for Salt Lake and Utah Counties have been focused on the smaller sized particles, and have therefore significantly reduced  $PM_{2.5}$  levels over the last 30 years. The  $PM_{10}$  maintenance plan shows continued improvement in the near term as more vehicles meet the Tier 2 emissions standards. Because so much of  $PM_{10}$  during wintertime temperature inversions is due to fine particles UDAQ anticipates that improvement will be seen in  $PM_{2.5}$  levels as well. Now that the  $PM_{10}$  maintenance plan has been completed, UDAQ can focus the State's technical resources on better understanding and addressing  $PM_{2.5}$ . All of these related SIPs work together to show that the



overall pollution control strategy in Utah is working. It is not necessary to do a separate analysis of how each plan affects the others because this work is proceeding concurrently and UDAQ deliberately focuses on emission reduction strategies that will meet multiple air quality goals. d) In regards to PSD, the total emissions of  $PM_{10}$  and  $PM_{10}$  precursors have gone down significantly since 1990 due to the  $PM_{10}$  SIPs, ozone maintenance plan, Tier 1 and Tier 2 emission standards for automobiles, federal acid rain regulations, and on-going reductions due to Utah's effective NSR program. UDAQ has not done a formal increment analysis, but it is clear that increment has been expanded in the area since 1990 for  $NO_x$  and since 1979 for  $SO_2$  and  $PM_{10}$ . The proposed revision to the major source baseline date (see comment #128 for a more detailed discussion) is intended to make the  $PM_{10}$  and  $SO_2$  increments a useful tool to prevent air quality from slowly degrading in the area to the level of the NAAQS. COMMENT # 56. The State of Utah prepared a projection year inventory for large point sources, as defined by an agreement between the State and EPA (100 tons per year of  $PM_{10}$ , 200 tpy of  $NO_x$ , or 250 tpy of  $SO_2$ ). The maintenance plan (at page 36, section IX.A.10.c(3), lines 17 and 18) indicates that emission limits in Section IX, Part H were only included for large point sources that are located in one of the  $PM_{10}$  nonattainment areas or that currently have limits in Section IX, Part H. The basis for not including limits for other large sources listed in the projected inventory does not appear to be technically defensible. As a starting point, we would expect large sources included in the modeling domain to be given emissions limits in the SIP. Any exclusion must be based on valid technical grounds. This is also relevant to the commitments made by UDAQ in its letter to the EPA dated April 18, 2002. (Comment made by the EPA; # B25, includes EPA comments # D1 and I3) RESPONSE: The identification of a subset of "large sources" for inclusion in Part H is less arbitrary than it may seem. It is important to recognize that the demonstration of maintenance was based on the UAM-AERO model which is regional in scale. Figure IX.A.23 of the proposed Maintenance Plan shows the domain that was modeled, and shows within that domain the outline of the current nonattainment areas. [A figure was provided to show the location of the "large sources" within the domain.] During the course of Plan development, various sensitivity runs were made to ascertain the effects of adjustments that could be made to the projection year inventories. One of the questions that was addressed during the course of this work was the spatial sensitivity of the receptors to adjustments made to the inventories of the "large sources." The inventory adjustment used to address this question involved a choice of two possible sets of projections: 1) the "PTE" approach that was ultimately used and documented as part of the proposal, and 2) the "traditional method" of projecting actual emissions that was employed at the "small sources" throughout the domain. As a general rule, the PTE method results in projection year inventories that are about 2 times as large as those calculated in the traditional way. Using this difference in approach, two sensitivity runs were made with the model. First, a subset of six large sources located nearest to the grid cells (near North Salt Lake) that were predicting the highest concentrations were "discounted" by switching from the PTE approach to the traditional approach. This model run yielded predicted concentrations that were 9% lower than benchmark concentration. A second run was made, wherein a subset of nine large sources located in the outlying regions of the modeling domain were similarly discounted. This time there was no difference in the maximum concentrations predicted by the model. It could therefore be concluded that the impact of large sources within the model is greatly limited in space. The list of (nine) sources that was discounted in the second modeling run is identical to the list of sources that was excluded from Part H, with only two exceptions. Payson City Power was discounted in the sensitivity run, but has been included in Part H because it resides in Utah County (a nonattainment area). Desert Power L.P., located right by U.S. Magnesium (which is excluded from Part H), was also excluded from Part H. Emissions from this source were not discounted in the sensitivity run, though based on the criteria they should have been. The difference in projected emission rates for these sources clearly has no effect on the concentrations predicted by the model in the Salt Lake nonattainment area; and by extension has no effect in the

Utah County nonattainment area as well, given that these nine sources are all well north of the county line. It therefore cannot be said that the Maintenance Plan has relied upon the emission rates modeled therein to demonstrate continued compliance with the  $PM_{10}$  standard. It follows then that emission limits are not necessary at these sources to legally support the assumptions used to make the assertion that the NAAQS will be maintained in these areas. Nevertheless, one might still wonder about the validity of these claims with respect to the Ogden City nonattainment area. Looking back at these same sensitivity runs, the difference in predicted concentrations at the Ogden City monitor was less than one percent and less than one microgram per cubic meter. Hence, the same conclusion is reached here as well. As further support for this notion, a report commissioned by UDAQ in the SIP development stage for Ogden titled "Source Apportionment Analysis for the Ogden  $PM_{10}$  Nonattainment Area (SECOR, July 1998) concluded the following: "The filter analysis data obtained from the Ogden City monitor was sufficient to resolve  $PM_{10}$  source contributions from primary motor vehicle exhaust, primary vehicle brakewear and re-entrained roadsalt, woodburning smoke, secondary sulfate and secondary nitrate. In addition these measurements were sufficient to determine that industrial sources were not major contributors to  $PM_{10}$  measured at the monitor." The evaluation was done using the Chemical Mass Balance model (CMB 7.0). Speaking specifically about industrial sources, the report says "As indicated in the source profile section discussed previously there were source profiles available for all of the major industries including steel mill, copper smelter, refinery, asphalt, cement, and grain processing to name a few. Repeated attempts were made to achieve a fit from these sources by eliminating other collinear sources, changing fitting species, or other CMB modeling tuning methods. The CMB model was not able to resolve any of the major industrial sources which are located along the Wasatch front as contributors to the exceedances at the Ogden monitor." In conclusion, it is worth noting that SIP limits at these sources were never necessary to bring any nonattainment area for  $PM_{10}$  back into compliance with the NAAQS, and it cannot be shown that they will be necessary now to insure maintenance of the  $PM_{10}$  standards throughout the period addressed by the Maintenance Plan. All "large sources" within the modeling domain were modeled in a very conservative way (see the "jump" in Point Source emissions between the episode year 2002 and the first projection year 2005 shown in Table IX.A.37 on page 36) so that the modeling result would itself have some measure of conservatism built in to it. This however is not reason alone to require that emission limits at those sources be included in the SIP. Furthermore, the nine sources excluded from Part H are, and will continue to be, regulated by Approval Orders, state and federal regulations, and in some cases Part 70 permits. This is sufficient to meet all requirements of the Clean Air Act.

COMMENT # 57. EPA requests that UDAQ submit a redline/strikeout of the final version of Section IX. Part H, to show exactly where UDAQ has made changes in Section IX. Part H as compared to what is currently contained in the federally approved SIP section 9.A, Appendix A, including any changes to the source specific particulate emission limitations. {Comment made by the EPA; # C general 2}

RESPONSE: We will work with EPA to accomplish what they need. The software UDAQ has available doesn't create a readable comparison document. This is aggravated by the fact that the original Part H is a WordPerfect document; our version of Word does not deal well with WordPerfect documents that include a great deal of formatting, as Part H does.

SIP SECTION IX.H.1 – GENERAL REQUIREMENTS: SOURCE TESTING:

COMMENT # 58. On page 1, section IX.H.1.a. – This section says "back half condensibles are required for inventory purposes." This language is currently approved into the existing SIP. However, UDAQ has never implemented this requirement. The SIP should also indicate that back half emissions must be considered in permit impact and applicability analyses and other applicability analyses under the SIP and CAA. This is also relevant to the commitments made by UDAQ in its letter to the EPA dated April 18, 2002. If the State believes that back-half condensibles and Method 202 testing will not have a substantial impact on the countywide emission inventories or attainment/maintenance demonstrations, the State should explain why

not. {Comment made by the EPA; # C1, includes EPA comment # I8} RESPONSE: The language in existing section IX.H requires back-half condensibles to be measured for inventory purposes using method 202 or other method specified by the Executive Secretary. It is not true that UDAQ has never implemented this requirement. To the contrary, UDAQ has been requiring the back-half test results ever since the PM<sub>10</sub> SIP was promulgated. This dates back to before method 202 was even approved by EPA. Concerning permitting actions, UDAQ currently requires back-half testing for compliance purposes on all coal fired power facilities as well as gas fired turbines that meet PSD applicability. UDAQ also routinely considers back-half emissions in determining applicability to various program elements (e.g. major source determination). Concerning the commitments made by UDAQ in its letter to the EPA dated April 18, 2002, "Backhalf emissions measuring for PM<sub>10</sub> emissions limit stack testing"; the requirement to test for back-half condensibles for inventory purposes will remain in the maintenance plan. However, using the back-half catch for compliance purposes will not become part of this maintenance plan. UDAQ has examined that possibility but concluded it would not be prudent to do so for the following reasons: 1) Although the "back-half catch" is incorporated into many of the emission factors included in AP-42, and consequently in the inventories used in the modeling demonstration, there are still many factors that do not consider this fraction. Consequently, it is used inconsistently throughout the inventory. 2) Similarly, the many emission limits that were established in Part H are inconsistent with respect to their inclusion of back-half emissions. To generally require the subsequent method of compliance determination to count the back-half catch against the established emission limit would unfairly penalize some of the sources. 3) These are "PM<sub>10</sub>" emissions that aren't present in the stack under stack conditions. 4) It is widely understood that many of the back-half condensable emissions measured by method 202 are either gaseous SO<sub>2</sub> or VOC compounds. In many instances there are concurrent emission limits on SO<sub>2</sub> or VOC, and this would constitute double-counting. In summary, UDAQ is aware of back-half emissions, and will continue to consider them in forthcoming permit actions. Should the need arise to promulgate a PM<sub>2.5</sub> SIP, it may be appropriate to consider these emissions for planning purposes at that time. COMMENT # 59. On page 2, section IX.H.1.a, the last sentence indicates that the production rate during compliance testing shall be no less than 90% of the maximum production achieved during the previous three years. This provision should say 90% of the maximum production achieved in the previous three years or 90% of the design capacity, whichever is greater, or the State should explain why the current provision is adequate.

{Comment made by the EPA; # C2} RESPONSE: UDAQ believes that the current provision is adequate, and is reflective of normal operating conditions. The provision is consistent with the Utah Air Quality Rules and consistent with the provision in the PM<sub>10</sub> SIP. The same provision was re-approved into the Utah County PM<sub>10</sub> SIP, by EPA, as recently as 2002. OPACITY: COMMENT # 60. On page 2, section IX.H.1.g, the last sentence indicates that for intermittent sources the requirement to make observations at 15-second intervals over a six minute period shall not apply. The State should clarify what will apply. This issue appears wherever the SIP or regulations specify opacity limits that might apply to intermittent sources. The State should clarify these other provisions as well. {Comment made by the EPA; # C3} RESPONSE: Many commentators expressed concern with the proposal to refine the method used to determine opacity from intermittent or moving sources. As a result, UDAQ will revert back to the existing language found in R307-201-3(9) wherever it applies. As presently construed, all other aspects of method 9 would apply to this method. COMMENT # 61. There is a small revision regarding opacity observations. The current language (IX.H.2.a.C): "For intermittent sources and mobile source emissions opacity observations shall be conducted using a modified method 9 (not all 24 readings for a six-minute period required)." The new language is found in IX.H.1.g: "For intermittent sources and mobile sources opacity observations shall be conducted using procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six minute period shall not apply and any time interval with no visible emissions shall not be

included." The new wording may be somewhat less vague than the old, but it does not remedy the serious objections KUCC has repeatedly expressed concerning this requirement. In summary, any modified form of Method 9 (used as an enforcement standard for intermittent or mobile sources, as opposed to a trigger for further action, is not a verifiable method, is not an approved method, and imposes a standard more restrictive than corresponding federal regulations and, according to Utah Code 19-2-106, cannot be maintained without a written finding after public comment and hearing and based on evidence in the record, that corresponding federal regulations are not adequate to protect public health and the environment of the state. Also, it appears that sources now addressed in Part H do not include intermittent or mobile sources, so that there is no need to address opacity observations for them. Therefore, the second sentence of IX.H.1.g should be deleted. {Comment made by Kennecott} RESPONSE: As explained in the response to comment # 60, UDAQ will revert back to the existing language wherever it appears. See also the response to comment # 115 for further discussion concerning the proposed rule revisions. COMMENT # 62. UIENC and others have raised serious issues over the years over similar methods for assessing opacity from mobile and intermittent sources. This proposal is not specific as to how the modified Method 9 test would be conducted, whether a specific number of readings must be taken and at what intervals, nor whether certification would be required for observers. EPA has never completed its 1993 proposal for opacity observations from intermittent sources; and that raises questions as to whether UDAQ can, in view of 19-2-106, issue a rule that is more stringent than the federal requirement. {Comment made by UIENC} RESPONSE: As explained in the response to comment # 60, UDAQ will revert back to the existing language wherever it appears. See also the response to comment # 115 for further discussion concerning the proposed rule revisions. FUGITIVE DUST: COMMENT # 63. Within the existing federally-approved SIP section IX.H.1.a.H there is a control measure addressing the treatment of unpaved roads in operational areas which are used by mobile equipment. This language is missing from the proposed SIP section IX.H.1. If UDAQ intends to remove this control measure from the existing SIP, it will need to correct the statement that Utah will continue to implement all control measures contained in the SIP. Furthermore, Utah will need to supply a demonstration that removal of the measure will not interfere with any requirement of the CAA, including requirements for attainment and maintenance of other NAAQS (see section 110(l) of the CAA), and will need to list the control measures within the contingency plan under section IX.A.10.c.(10) of the maintenance plan (see section 175A(d) of the CAA). {Comment made by the EPA; # C general 3} RESPONSE: Sources of fugitive dust located in the Maintenance area are required to have a fugitive dust plan, see R307-309-6. UDAQ has found that fugitive dust plans work better than this provision. Fugitive dust plans are developed for each source. Thus, the fugitive dust plans can be tailored to address a source's unique issues, and thereby controlling fugitive dust better than one arbitrary requirement. For example, the water application rate to control fugitive dust for an unpaved operational area located in St. George will be different from one located in Heber. However, to ensure that there is a minimum dust control requirement in the SIP, UDAQ will include the following condition in the SIP at Section IX.H.1.h that requires sources to control fugitive dust on all unpaved operational areas and keep records of the treatments used to control fugitive dust: "h. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp or moist condition, unless the ambient temperature is below freezing. The opacity shall not exceed 20% during all times. If chemical treatment other than magnesium chloride is to be used, the plan must be approved by the executive secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items: A. Date; B. Number of treatments made, dilution ratio, and quantity; C. Rainfall received, if any, and approximate amount; and D. Time of day treatments were made. Records of treatment shall be made available to the executive secretary upon request

and shall include a period of two years ending with the date of the request." REFINERIES; GENERAL REQUIREMENTS: COMMENT # 64. On page 2, section IX.H.1.h(1)(a) says that SRU efficiency shall be estimated and reported a minimum of once per year. We don't believe this is adequate to protect the NAAQS. {Comment made by the EPA; # C5} RESPONSE: The annual estimation of SRU efficiency was not required in the current PM<sub>10</sub> SIP. It has been added to several of the refinery permits over time. The inclusion of this requirement is an inclusion of the permit condition. Further, the 95% is the design requirement for the sulfur recovery units at the refineries. The emission limit for each SRU was determined by taking 5% of the maximum sulfur input to each unit. The emission limits control what is emitted to the air shed. As long as those limits are not exceeded, the NAAQS are protected. COMMENT # 65. On page 2, section IX.H.1.h(1)(a) – This section indicates that the relevant requirement (95% sulfur removal efficiency) applies "except for startup, shutdown, or malfunction of the SRU." This is not acceptable. EPA cannot approve provisions into SIPs that provide automatic exemptions from emission limits due to startup, shutdown or malfunction. This also applies to: 1) proposed section IX.H.1.h(1)(b): which indicates that the relevant requirement (reducing the H<sub>2</sub>S content of the refinery plant gas to 0.10 grain/dscf (160 ppm) or less) applies "except for startup, shutdown, or malfunction of the amine plant" {Comment made by the EPA; # C6, includes EPA comments # C7 and C12} RESPONSE: DAQ took this condition from EPA Consent Decrees. In Consent Decrees with the two largest refineries, startup/shutdown/malfunctions are exempt from requirement for 95% efficiency. 40 CFR 60 Subpart A also allows such an exemption from Subpart J, Standards of Performance for Petroleum Refineries. 40 CFR 63.6(h)(1) also allows this exemption. The Consent Decree between BP-Amoco and EPA, dated 8/2/02 (<http://www.usdoj.gov/enrd/bpcd.htm>), requires that "BP shall comply with a 95% recovery efficiency requirement for all periods of operation except during periods of startup, shutdown, or malfunction of the SRP." [clause 21.B.iv.a]. This Consent Decree was signed by "STEVEN A. HERMAN, Assistant Administrator for Enforcement and Compliance Assurance, United States Environmental Protection Agency, Washington, D.C. 20460" – this is the same Steven Herman responsible for the 1999 guidance "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown." Since the Consent Decree is dated more recently, and federal regulations still allow the situation discussed here, UDAQ sees no conflict with federal guidance. The recently-drafted (2003) Consent Decree with Chevron requires: "16. Compliance with Specific SO<sub>2</sub> Emission Limits (El Segundo, Hawaii, Pascagoula, and Salt Lake City FCCUs): "e: SO<sub>2</sub> emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the emission limit of 50 ppmvd SO<sub>2</sub> @ 0% O<sub>2</sub> on a 7 day rolling average basis, provided that during such periods Chevron implements good air pollution control practices to minimize SO<sub>2</sub> emissions." "48. Compliance with Emissions Limits at the Salt Lake City SRP. . With respect to the Salt Lake City SRP, Chevron shall comply with a 95% sulfur recovery efficiency requirement for all periods of operation except during periods of startup, shutdown or Malfunction of the SRP." (<http://www.epa.gov/compliance/resources/decrees/civil/caa/chevron-cd.pdf>) 40 CFR 60 Subpart A at 60.8(c) states "Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard." Subpart J does not "otherwise specify." 40 CFR 63 at 63.6(h)(1) states: "(h) Compliance with opacity and visible emission standards— (1) Applicability. The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall

still be required to comply with the opacity and visible emission standards and other applicable requirements." See also, "Proposed Rule Revisions:" (Excess Emissions), Comments # 113 and 114 for further discussion. COMMENT # 66. IX.H.1.h.(1)(e): opacity at catalytic cracking units – This section indicates that the opacity for catalytic cracking units shall not exceed 20% if Method 9 is the compliance determination method, and 30% if a continuous opacity monitoring system (COMS) is the compliance determination method. The requirement regarding the 30% opacity and COMS is new and was not in the original 1991 PM<sub>10</sub> SIP. We have two concerns with this provision: First, before we could approve a relaxation in the opacity limit to 30%, the State would need to demonstrate that the relaxation would not interfere with any applicable requirement concerning attainment and reasonable progress (as defined in CAA section 171) or any other applicable requirement of the Act, including maintenance. See CAA section 110(I). Second, as a general matter, the opacity limits should not vary based on the method used to determine compliance. We do not accept the proposition that a switch to COMS renders an opacity limit more stringent. {Comment made by the EPA; # C10} RESPONSE: DAQ was attempting to be consistent with federal standards and to avoid a credible-evidence issue with the two standards. However, the data required to justify a relaxation of the opacity limit to 30% is not readily obtainable in the time allowed. DAQ will remove the 30% with COMS option, and return to the current 20% opacity with Method 9 as the compliance method in IX.H.1.h.(1)(e). If the required data become available, DAQ will readdress the issue at that time. The 20% opacity is clarified to read as follows to show that all refineries must meet the same opacity limit, regardless of facilities or installations between the regenerator and the exit point. "(e) not exceed 20% opacity at any process flare. Opacity at catalytic cracking units, including those with ESP facilities, shall not exceed 20%, with compliance to be determined in accordance with Subsection (g) above." COMMENT # 67. IX.H.1.h.(2): Compliance demonstrations for refinery wide emission limits – Subsection IX.H.1.h.(2)(a) says "Compliance with the maximum daily (24-hr) plantwide emission limitations for PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> shall be determined by adding the calculated emission estimates for all fuel burning process equipment to those from any stack-tested or CEM-measured source components." This language is not specific enough to be enforceable as a practical matter. For the fuel burning process equipment, standard language from current Approval Orders for the refineries is much more specific and should be used in this section. For the fuel burning process equipment, since this language is standardized for all the refineries, we recommend it be included in the General Requirements at IX.H.1, rather than under each refinery in IX.H.2 as was done in the original PM<sub>10</sub> SIP. This will avoid redundancy. Specifically, this has been proposed as "multiplying the quantity of each fuel burned at the affected units by the appropriate emission factor for that fuel and summing the results." This is not specific enough to be enforceable. It should be made clear how the quantity of fuel combusted is to be determined and how the appropriate emission factor is to be determined. This comment applies to the following locations within the proposed section IX.H.2: For Chevron: plantwide PM<sub>10</sub> limit, Subsection IX.H.2.c.(1); plantwide SO<sub>2</sub> limit, Subsection IX.H.2.c.(2)(a), also the phrase "and summing the results for the affected units" should be added. plantwide NO<sub>x</sub> limit, Subsection IX.H.2.c.(3)(a) also the phrase "and summing the results for the affected units" should be added. For Flying J/Big West Oil Co. plantwide PM<sub>10</sub> limit, Subsection IX.H.2.d.(1), also the phrase "and summing the results for the affected units" should be added. plantwide SO<sub>2</sub> limit, Subsection IX.H.2.d.(2)(a)(ii), also the phrase "and summing the results for the affected units" should be added. plantwide NO<sub>x</sub> limit, Subsection IX.H.2.d.(3)(a)(ii), also there is no statement about how emissions from the fuel burning process equipment are to be determined. For Holly: plantwide PM<sub>10</sub> limit, Subsection IX.H.2.h.(1), also the phrase "and summing the results for the affected units" should be added. plantwide SO<sub>2</sub> limit, Subsection IX.H.2.h.(2), also the phrase "and summing the results for the affected units" should be added. plantwide NO<sub>x</sub> limit, Subsection IX.H.2.h.(3)(a), also the phrase "and summing the results for the affected units" should be added. For Tesoro: plantwide PM<sub>10</sub> limit, Subsection IX.H.2.q.(1). plantwide SO<sub>2</sub>

limit, Subsection IX.H.2.q.(2)(a)(ii), also the phrase "and summing the results" should be added. plantwide NO<sub>x</sub> limit, Subsection IX.H.2.q.(3)(a), also the language should be more consistent with the others. {Comment made by the EPA; # C11} RESPONSE: DAQ proposes to include additional compliance information in IX.H.1.h.2(a) regarding emission factors as shown below. Also, the source-specific sections cited in the above EPA comments have been edited to read as follows to make the compliance demonstrations more consistent with each other and EPA's proposed changes: "(2) Compliance Demonstrations. (a) Compliance with the maximum daily (24-hr) plant-wide emission limitations for PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub> shall be determined by adding the calculated emission estimates for all fuel burning process equipment to those from any stack-tested or CEM-measured source components. NO<sub>x</sub> and PM<sub>10</sub> emission factors shall come from AP-42 or test data. For SO<sub>x</sub>, the emission factors are: Natural gas: EF = 0.60 lb/MMscf; Propane: EF = 0.60 lb/MMscf. Plant gas: the emission factor shall be calculated from the H<sub>2</sub>S measurement required in IX.H.1.h.(1)(b). The emission factor, where appropriate, shall be calculated as follows: EF (lb SO<sub>2</sub>/MMscf gas) = (24 hr avg. ppmv H<sub>2</sub>S)/10<sup>6</sup> \* (64 lb SO<sub>2</sub>/lb mole) \* (10<sup>6</sup> scf/MMscf) / (379 scf / lb mole). Fuel oils (when permitted): The emission factor shall be calculated based on the weight percent of sulfur, as determined by ASTM Method D-4294-89 or approved equivalent, and the density of the fuel oil, as follows: EF (lb SO<sub>2</sub>/k gal) = density (lb/gal) \* (1000 gal/k gal) \* wt.% S/100 \* (64 lb SO<sub>2</sub>/32 lb S). Where mixtures of fuel are used in an affected unit, the above factors shall be weighted according to the use of each fuel." SRU TURNAROUND AND UPSET FLARING EMISSIONS: COMMENT # 68. Sections IX.H.1.h.(2)(e) and (f) – These sections say that the emissions increase (above normal operations) experienced during SRU routine turnarounds, as well as emissions due to upset flaring, shall not be included in the daily (24-hr) or annual compliance demonstrations. UDAQ needs to address the refinery SRU and flaring issue in the Utah SIP. We partially approved and partially disapproved the Billings/Laurel SO<sub>2</sub> SIP for several reasons, including the fact that the flare emissions were considered in the attainment demonstration but the SIP did not establish enforceable emission limits for these emission points. This is also relevant to the commitments made by UDAQ in its letter to the EPA dated April 18, 2002. {Comment made by the EPA; # C6; includes EPA comments # C7, C12 and I5} RESPONSE: Concerning SRU maintenance downtime, Part IX.H of the proposed SIP does not excuse any emissions increase above normal operations at the refineries during routine turnaround maintenance of the sulfur recovery units, unless such maintenance is scheduled during the period of April 1 through October 31. These summer months lack the cold temperatures and other atmospheric conditions necessary to drive secondary aerosol formation from PM<sub>10</sub> precursors such as SO<sub>2</sub>. This seasonal approach is consistent with that of the approved SIP, but the proposed SIP revision has essentially added the month of March to the "winter PM<sub>10</sub> season." Concerning flares: UDAQ has established enforceable limits regarding flares. Under recent consent decrees with a majority of the refineries in the PM<sub>10</sub> Maintenance Area, EPA has negotiated federally enforceable language requiring injunctive relief for flares at Salt Lake's refineries. Requirements that have been inserted into the federally enforceable permits include applying the requirements of 40 CFR Part 60, Subpart J, "Standards Performance at Petroleum Refineries" for flaring devices and the requirements to investigate acid gas and tail gas flaring incidents, perform a root cause analysis of the incident and take corrective actions to minimize the likelihood of reoccurrence. The State's position is that the injunctive relief in the consent decrees is adequate to address emissions from flares at the Salt Lake refineries. COMMENT # 69. Flares at refineries should not be exempt from site-wide caps and should be used only for their permitted uses: true emergencies. Flares are a significant episodic source of toxic emissions, particularly when wind prevents complete combustion. Each flare should have a flow meter at the inlet and the waste gas composition should be recorded. Accurate inventories of sulfur content in flare fed streams should be collected and critically analyzed; each flare should be video-monitored and the images preserved. Ambient monitoring should be conducted to determine the effects of wind speed and direction on combustion



efficiency and to provide realistic emission factors to calculate the emissions of particulate matter and hydrocarbons. These projects could be undertaken as Supplemental Environmental Projects as settlements for Notices of Violation as they occur. All information should be available to the public, as is done by the Bay Area Air Quality Management District in California; see their web site at <http://www/baaqmd.gov>. {Comment made by Wasatch Clean Air Coalition} RESPONSE: See response to comment # 68. COMMENT # 70. The refineries should install some type of monitoring devices at the flares, because they emit large amounts of measured and unmeasured SO<sub>2</sub>, NO<sub>x</sub>, VOC and particulates annually. Also, their combustion efficiency can be much lower, in certain conditions such as high wind speeds, than their historically assumed 98% destruction efficiency. Areas requiring flare monitoring for other pollutants include Billings, MT; California; and Houston, TX. The Billings SO<sub>2</sub> SIP requires use of continuous emissions monitoring on refinery flares to measure H<sub>2</sub>S concentrations. Air quality management districts in California require flow monitors and video monitors. Texas requires continuous flow monitoring systems at flares to measure and record emissions of highly reactive volatile organic compounds (HRVOCs). Monitoring particulates would require different monitoring devices by the above examples provide a precedent for monitoring flare emissions. {Comment made by Environmental Defense and Utah Chapter, Sierra Club} RESPONSE: See response to comment # 68.

CLARIFICATIONS & CORRECTIONS: COMMENT # 71. On page 2, section IX.H.1.h(1) – refers to the “PM<sub>10</sub> nonattainment area.” This should be revised to “PM<sub>10</sub> maintenance area.” {Comment made by the EPA; # C4} RESPONSE: UDAQ will clarify the statement to cover either situation. The sentence at IX.H.1.h(1) will be revised to read as follows: “All petroleum refineries in or affecting the PM<sub>10</sub> nonattainment/maintenance area shall...” COMMENT # 72. IX.H.1.b.(1)(b): H<sub>2</sub>S content in plant gas at petroleum refineries – The term “plant gas” needs to be defined in the SIP. In section IX.H.1.h.(1)(b), the term apparently means only the fuel gas at refineries which is run through the amine unit for H<sub>2</sub>S removal. However, in the Approval Orders for the refineries (example: condition 15.A of the April 8, 2005 AO for Chevron), the term could be construed to mean not only the fuel gas which requires H<sub>2</sub>S removal at the refinery, but also pipeline quality natural gas supplied from outside the refinery. Also, the statement that “Compliance shall be based on a rolling average of 24 hours or less” needs to be reworded to make it clear what specific averaging time shall be used. The expression “24 hours or less” is not specific. {Comment made by the EPA; # C8} RESPONSE: “Plant gas” as used in this document is intended to have the same meaning as “fuel gas,” as defined in 40 CFR Subpart J at 60.101(d): “Fuel gas means any gas which is generated at a petroleum refinery and which is combusted. Fuel gas also includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Fuel gas does not include gases generated by catalytic cracking unit catalyst regenerators and fluid coking burners.” The terms “plant gas,” “common refinery fuel gas” and “fuel gas” were used interchangeably in the current PM<sub>10</sub> SIP and approval orders. Refinery representatives in the noted meeting agreed on use of the Subpart J language. The averaging time for the H<sub>2</sub>S limit was stated as “24 hours or less” to allow for use of records of the 3-hr averaging time required in Subpart J at 60.105(e)(3). Refinery representatives agreed to deleting the phrase “or less,” in order to maintain consistency with the usual PM<sub>10</sub> averaging period. The language in condition IX.H.1.b.(1)(b) will be changed to read as follows: “(b)reduce the H<sub>2</sub>S content of the refinery plant gas to 0.10 grain/dscf (160 ppm) or less, except during startup, shutdown, or malfunction of the amine plant. Compliance shall be based on a rolling average of 24 hours. The owner/operator shall install and maintain a continuous monitoring system for monitoring the H<sub>2</sub>S content of the refinery plant gas and a continuous recorder to record the H<sub>2</sub>S in the plant fuel gas. The monitoring system shall comply with all applicable sections of R307-170 and 40 CFR 60, Appendix B, Specification 7. As used herein, refinery “plant gas” shall have the meaning of “fuel gas” as defined in 40 CFR 60, Subpart J, and may be used interchangeably. If the monitor reading is not available, the refinery plant gas shall be sampled as closely to the monitor location as safely possible at least once each



day. The sample shall be analyzed for sulfur content by use of a chemical detector tube capable of reading the required concentration (e.g., Dräger Hydrogen Sulfide No. 1/D or equivalent). For natural gas, compliance is assumed while the fuel comes from a public utility." COMMENT # 73. IX.H.1.h.(1)(c): The State has inserted the phrase "in external combustion equipment." We need to understand the basis for this change to determine whether it is appropriate. {Comment made by the EPA; # C9} RESPONSE: In IX.H.1.h.(1)(c), the text states that refineries "may no longer burn fuel oil in external combustion devices...." The point sources affected by this restriction are intended to be the fuel gas combustion units, such as boilers and furnaces, that combust at atmospheric pressure. There was concern from the refineries that the prohibition as stated in the current SIP ("no longer burn fuel oil" without clarification) did not allow for use of diesel engines used in the refineries. All cited concerns were internal combustion units, so the phrase "in external combustion equipment" was added to the intended restriction. "External combustion" shall be defined in IX.H.1.h.(1)(c) to incorporate the wording of R307-413-4(1): "(c) no longer burn fuel oil in external combustion equipment, except during periods of natural gas curtailment or as specified in IX.H.2. External combustion shall mean combustion that takes place at no greater pressure than one inch of mercury above ambient pressure." COMMENT # 74. IX.H.1.h.(3)(b) - This section should refer back to IX.H.1.h.(2) (e), not (f). {Comment made by the EPA; # C13} RESPONSE: UDAQ agrees, and will make the appropriate correction to condition IX.H.1.h.(3)(b). SIP SECTION IX.H.2. - SOURCE SPECIFIC PARTICULATE EMISSION LIMITATIONS: IX.H.2.A. BOUNTIFUL CITY POWER. COMMENT # 75a. Subsection IX.H.2.a.(1)(a) contains a NO<sub>x</sub> emission limit of 0.0721 tons/day for a turbine (equivalent to 6.0 lb/hr). The original 1991 PM<sub>10</sub> SIP has limits for a 9750-hp engine of 79.5 lb/hr and 3.70 grams/hp-hr (13 times more emissions than the turbine). This is engine #8, which is listed in the current AO. It would seem important to place limits on engine #8. RESPONSE: This source is a peaking plant, and operates only intermittently to meet temporary power demands that occur more often in the warm summer months when air conditioners are being used, and less often in the winter when there is less demand for power in general. When the source does operate, the turbine is the primary source of power generation, not the engine. Therefore, for purposes of the PM<sub>10</sub> plan, it is the emissions from the turbine that should be included. COMMENT # 75c. Subsection IX.H.2.a.(1)(b) contains a plantwide NO<sub>x</sub> emission limit only for a rolling 12-month period. A plantwide NO<sub>x</sub> emission limit in tons per day should also be included. RESPONSE: As explained in the response to comment # 75a, it is the turbine that is primarily used to generate power at the plant. As proposed, there is a daily NO<sub>x</sub> limit on the turbine. COMMENT # 75c. Subsection IX.H.2.a.(3) requires a NO<sub>x</sub> CEMS be installed, if plantwide NO<sub>x</sub> emissions exceed 200 tons over a 12-month period. This subsection should say which engine(s) the CEMS would have to monitor (there are 5 other large engines). {Comments made by the EPA} RESPONSE: DAQ finds it difficult to pre-specify the details of a monitoring plan when the reasons triggering the need for monitoring are not yet determined. To insure such monitoring plan yields useful data to verify compliance with established limits, DAQ believes it should retain the ability to tailor the CEMS plan to suit the conditions at the time that the requirement is triggered. IX.H.2.b. CENTRAL VALLEY WATER RECLAMATION FACILITY: COMMENT # 76a. The last two sentences of IX.H.2.b.(1)(b) should be deleted, as they are redundant with General Requirements. RESPONSE: UDAQ agrees with this comment and will remove the duplicated sentences. COMMENT # 76b. Also, stack testing should be more frequent than once every five years. Emissions of NO<sub>x</sub> from engines could change considerably over five years. {Comments made by the EPA} RESPONSE: EPA's comment stems from the argument that NO<sub>x</sub> emissions from the engines could change considerably over a five-year period. The most recently issued AO for the source (DAQE-AN04145005-02) specifies that the engines shall also be retested whenever a new baseline is established as a result of adjustments in fuel-to-air ratio, maintenance, or repair of the emission unit. UDAQ feels that this sort of requirement is most properly placed within the domain of the AO, as it can then be

adjusted to become more frequent should the situation necessitate such a change. IX.H.2.c. CHEVRON PRODUCTS CO.: COMMENT # 77a. Subsection IX.H.2.c.(1) does not contain a 12-month limit on plantwide PM<sub>10</sub> emissions. It is not clear to us why another refinery in IX.H.2. (Flying J) would have a 12-month limit but Chevron would not. RESPONSE: It was demonstrated in the review for DAQE-243-98 that many of the existing annual limits were equal to or less stringent than the corresponding daily limits. In preparation for title V permits, redundant limits were removed, including the limit addressed here, and only the shorter-term limits were retained. COMMENT # 77b. Subsection IX.H.2.c.(2)(a) says the SO<sub>2</sub> emission factor for the FCC CO Boiler and Catalyst Regenerator, as well as compliance with General Requirements at IX.H.1.h(1)(d), shall be determined by a stack test at least once every three years, with SO<sub>2</sub> CEMS allowed as an alternative. This subsection should be reworded to require a SO<sub>2</sub> CEMS, along with a volumetric flow measurement device. The Chevron Consent Decree, filed October 16, 2003 in U.S. District Court, requires a CEMS to be installed by June 2004. RESPONSE: The CEMS allowed as an alternative monitoring solution for the maintenance plan is a recognition that the consent decree required the installation of a CEMS on the FCC. However, the limits given in the consent decree are all in terms of "ppmv," or dry concentration; the CEMS already required in the consent decree is sufficient for that limit. The consent decree did not impose mass limits, nor did it require a volumetric flow device. The limits in the MP are in tons/day. The required stack testing is adequate for demonstrating compliance with those limits. The language as written allows Chevron the option to use the consent-decree CEMS for compliance with the mass limits at a later date if it so chooses; at that time, a flow device or other alternate monitoring plan would be required. Also, the comparison to Tesoro is inappropriate. Tesoro is monitoring SO<sub>x</sub> under an alternative monitoring plan that requires the use of both concentration and flow monitors. Chevron is not under an alternative plan at this time. COMMENT # 77c. It is not clear why no point-specific emission limits are proposed for the FCC CO Boiler and Catalyst Regenerator. The original 1991 PM<sub>10</sub> SIP included emission limits for PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. The emission limit for SO<sub>2</sub> was nearly as high as the emission limit for the SRU. The magnitude of emissions would seem to warrant emission limits. {Comments made by the EPA} RESPONSE: Comment on "no point-specific limits for FCC": There are no point-specific limits for the FCC/CO boiler because the FCC and associated equipment was moved under the various emission caps in 2000, and the cap limitations were adjusted appropriately. See DAQE-6323-00. IX.H.2.d. Flying J/Big West Oil Co.: COMMENT # 78a. Subsection IX.H.2.c.(1)(ii) says the PM<sub>10</sub> emission factor of 22 lbs/kbbl for the Catalyst Regeneration System "may be re-established by stack testing." This is not an enforceable requirement. This subsection should specify the circumstances or timeframe under which it would be necessary to re-establish the PM<sub>10</sub> emission factor by stack testing. RESPONSE: The PM<sub>10</sub> emissions from the Catalyst Regeneration System are calculated as:  $PM_{10} = F * EF$ , where F is feed rate to the FCC in kbbl/time and EF is 22 lbs/kbbl. The calculation is enforceable. The language in the maintenance plan is written to allow an update of the emission factor if requested. There is no fixed cycle for revisiting this factor or determined need at this time, nor was there any such language in the existing SIP. During development of the title V permit, a schedule or conditions may be negotiated, and the MP should not interfere with that effort. COMMENT # 78b. Subsection IX.H.2.d.(2)(a)(ii) says the scalar values of 43.3 lb SO<sub>2</sub>/hr, 7688 bbl feed/day, and 0.1878 wt% sulfur in feed, shall be re-established by stack testing at least every five years. It is not clear to us how stack testing could re-establish a feed rate or a wt% sulfur in feed. This subsection needs clarification. RESPONSE: The current equation for determining SO<sub>x</sub> emissions is as follows:  $SO_x = [F/x] * [(wt\% \text{ sulfur in feed})/(z)] * [y] * [\text{hours of operation per day}]$ , where F = operational feed rate, bbl/day, for which the SO<sub>2</sub> emission is to be calculated; x = Feed rate, bbl/day, at the latest test. Until another test, use x = 7,688 bbl/day; y = SO<sub>2</sub> emission rate, lbs/hr, corresponding to x bbl/day feed rate. Until another test, use y = 43.3 lbs/hr; z = Sulfur content, in weight %, measured in feed x at the latest test. Until another test, use Z = 0.1878%.

This equation uses ratios, and follows the instructions in the existing SIP for determining the SO<sub>2</sub> contribution of the Plume Burner (the exit point for the old TCC). The feed rate, feed sulfur content and SO<sub>2</sub> emission rate are determined during a stack test; then the daily process variables (feed rate, feed sulfur content) are measured and inserted into the equation to calculate the current emissions. Future stack tests would allow for changes in the constants (scalar values) of the equation. COMMENT # 78c. Also, once every five years is not frequent enough. The crude slate and the performance of the Catalyst Regeneration System could change considerably in five years. This also appears to be a relaxation of the existing federally approved SIP. The existing SIP requires the weight % sulfur be determined by the refinery lab on a monthly basis and the gravity of the feed determined daily. RESPONSE: Flying J is currently required in its approval order (DAQB-AN0122033-04) to determine feed sulfur content every 30 days and to determine the feed rate daily. The sulfur content monitoring will be included in this source's section of the MP. Changes in the crude that affect SO<sub>2</sub> emissions are addressed by this sulfur testing and reflected in the equation above. However, gravity of the feed is not used in any calculation in this MP, so that has not been included. The existing SIP has no stated testing frequency for verifying the constants for this FCC, so the state's five-year rule was used as a default. The language for retesting will be modified to "at least every five years" so that the MP does not interfere with development of a suitable interval in the title V permit. COMMENT # 78d. Subsection IX.H.2.d(a)(ii) says the scalar value of 180 ppm NO<sub>x</sub> in Catalyst Regeneration System flue gas "may be re-established by stack testing." This is not an enforceable requirement. This subsection should specify the circumstances or timeframe under which it would be necessary to re-establish the scalar value by stack testing. {Comments made by the EPA} RESPONSE: The current equation for determining NO<sub>x</sub> emission is as follows:  $NO_x = (\text{Flue Gas, moles/hr}) \times (180 \text{ ppm} / 1,000,000) \times (30.006 \text{ lb/mole}) \times (\text{operating hr/day})$ . The calculation is enforceable. The language in the maintenance plan is written to allow an update of the emission factor determined at the last stack test if requested. There is no fixed cycle for revisiting this factor or determined need at this time, nor was there any such language in the existing SIP. During development of the title V permit, a schedule or conditions may be negotiated, and the MP should not interfere with that effort. IX.H.2.f. GENEVA ROCK PRODUCTS, OREM PLANT. COMMENT # 79. Subsection IX.H.2.f.(1) specifies daily emission limits for PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>, but no 12-month limits. It is not clear to us why. {Comment made by the EPA} RESPONSE: This comment appears in a number of instances, and the general response is as follows: During the review of the latest permit(s) for these sources it was determined that many of the existing annual limits were equal to or less stringent than the corresponding daily limits. In fact, many of these sources did not have a specified annual limit but instead only had hourly limitations on individual emission units. When UDAQ established the daily emission limits for these sources, the corresponding annual limits were established by simply multiplying the daily limit by 365 days. No added value would be realized by the inclusion of an additional and mathematically redundant limitation. IX.H.2.g. GENEVA ROCK PRODUCTS, POINT OF THE MOUNTAIN. COMMENT # 80. Subsection IX.H.2.g.(1) specifies a daily emission limit for PM<sub>10</sub>, but no 12-month limit. It is not clear to us why not. {Comment made by the EPA} RESPONSE: The annual limit was redundant. See response to comment #79 for a more complete explanation. IX.H.2.h. HOLLY REFINING AND MARKETING CO. COMMENT # 81. Subsection IX.H.2.h.(1) does not contain a 12-month limit on plantwide PM<sub>10</sub> emissions. It is not clear to us why another refinery in IX.H.2. (Flying J) would have a 12-month limit but Holly Refining would not. {Comment made by the EPA} RESPONSE: The annual limits listed in the current approval order (DAQB-AN0123019-05) are equivalent to and redundant with the daily limits. In preparation for title V permits, redundant limits were removed, including the limit addressed here, and only the shorter-term limits were retained. IX.H.2.i. INTERSTATE BRICK. COMMENT # 82a. Subsection IX.H.2.i.(1) specifies daily emission limits for PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>, but no 12-month limits. It is not clear to us why not. RESPONSE: The annual limitation was redundant.

See response to comment #79 for a more complete explanation. COMMENT # 82b. Also, a stack test frequency of once every five years for PM<sub>10</sub> and NO<sub>x</sub> is not frequent enough.

{Comments made by the EPA} RESPONSE: This frequency of stack testing is consistent with the rule (R307-165-1), and is identical to the most recent AO issued to the source (DAQE-296-99). IX.H.2.j. KENNECOTT - BINGHAM CANYON MINE AND COPPERTON

CONCENTRATOR. (1) BINGHAM CANYON MINE: COMMENT # 83a. The only proposed limitation for the Mine is a limit on sulfur content of diesel fuel. The original 1991 PM<sub>10</sub> SIP has a limit of 27,500,000 gallons per year of fuel consumed and a limit of 150,500,000 tons per year of ore and overburden moved. By eliminating these limits, UDAQ would eliminate any enforceable limit on the emission potential of the Mine. This is not acceptable. Since this source is listed in SIP section IX.H.2, there must be enforceable emission limits (or surrogates for emission limits) that reflect the amount of potential emissions used for modeling for NAAQS attainment/maintenance (2,560 tons/yr for PM<sub>10</sub>, 22.6 tons/yr for SO<sub>2</sub>, and 5,078 tons/yr for NO<sub>x</sub>). Also, UDAQ should explain why the "modeled PTE" for the Mine is only 22.6 tons/yr for SO<sub>2</sub>, when the current AO for the Mine lists the PTE for SO<sub>2</sub> at 97 tons/yr. RESPONSE: UDAQ agrees with this comment. The limitation on ore and overburden moved will be replaced as per the value listed in the AO. The most recent AO for this source (DAQE-178-02) changed the value of this limitation. The limitation will now be 197,000,000 tons per year of ore and overburden moved. The fuel usage limitation is an artifact of the original 1991 SIP, and must be updated to reflect the changes in diesel fuel that are required by recent rules. Rather than limiting the source to a total number of gallons of fuel consumed, UDAQ will modify the limitation to read as follows: "Annual emissions of SO<sub>2</sub> from the combustion of fuel shall not exceed 97 tons per year. SO<sub>2</sub> emissions from fuel burning shall be determined by applying the appropriate emission factors to the relevant quantities of fuel combusted." The general requirements will then cover the recordkeeping and reporting requirements. UDAQ will make the revisions discussed above such that IX.H.2.j reads as follows: "j. KENNECOTT UTAH COPPER: MINE and COPPERTON CONCENTRATOR. (1) BINGHAM CANYON MINE: (a) Total material moved (ore and waste) shall not exceed 197,000,000 tons per 12-month period. (b) Annual emissions of SO<sub>2</sub> from the combustion of fuel shall not exceed 97 tons per year. SO<sub>2</sub> emissions from fuel burning shall be determined using the following equation:  $\text{tpy SO}_2 = (\text{gal fuel} / \text{year}) * (7.05 \text{ lb/gal}) * (\% \text{ S by wt.}) / 2000 \text{ lb/ton} * (2 \text{ lb SO}_2 / \text{lb S})$ . (c) The sulfur content of diesel fuel oil burned in the equipment engines shall not exceed 0.03 pounds of sulfur per million BTU heat input as determined by the appropriate ASTM Method. This represents 0.05% sulfur by weight in the fuel oil." UDAQ also agrees with the final section of this comment, specifically that the reference to the "modeled PTE of 22.6 tons/yr of SO<sub>2</sub>, is in error. The correct value should indeed be 97 tons/yr as listed above. The difference between the two values is 75 tpy.

Nevertheless, the model is not sensitive to a difference of this magnitude, and any increase or change in the overall impacts as a result of this error would be extremely minor. COMMENT # 83B. The original PM<sub>10</sub> SIP includes requirements for control of fugitive emissions at the Mine, including a requirement for a Fugitive Dust Control Plan. A copy of the current approved Fugitive Dust Control Plan is attached to the AO for the Mine, dated March 22, 2002. If emission projections for modeling assume credit for these controls, then the requirements for these controls should be included in section IX.H.2.j. {Comments made by the EPA} RESPONSE: UDAQ did not rely on the dust control measures as outlined in the Fugitive Dust Control Plan when establishing the emission projections for modeling. Rather, it was the emission inventory submitted for 2001, in conjunction with the Approval Order, that acted as the basis for the modeled emissions. (2) COPPERTON CONCENTRATOR: COMMENT # 84. The section in Part H applying to the Copperton Concentrator should be deleted, because the rotary kiln has been shut down and removed, and the Molybdenite Plant is being upgraded with improved technology. A Notice of Intent covering these changes was submitted to UDAQ on February 8, 2005. The net effect will be reduced emissions for PM<sub>10</sub> and NO<sub>x</sub>, and SO<sub>2</sub> emissions will be

nearly eliminated. Therefore, there are not now and will not be any sources at the Concentrator with high enough potential to emit to be included in Part H. {Comment made by Kennecott} Response: UDAQ agrees. The final Approval Order is about to be issued. The following is the abstract from the engineering review associated with the project: "Kennecott Utah Copper Corporation (KUCC) has requested approval to install a pebble crushing process at KUCC's Copperton Concentrator. The KUCC Copperton Concentrator is currently operating under the Approval Order DAQE-862-01, dated November 20, 2001. KUCC intends to add two pebble-crushing units and related material handling equipment. This will allow KUCC to increase the throughput of copper ore through the concentrator and improve process efficiency. KUCC has stopped operation of the Feed Molybdenite Dryers and Molybdenite Rotary Kiln and has requested that they be removed from the AO. The stack testing requirements for this equipment and for the Product Molybdenite Dryers have been removed. KUCC is also requesting replacement of one of its product molybdenite dryers and associated heater with a larger product molybdenite dryer that will use the existing product molybdenite dryer scrubber and one of the existing feed molybdenite dryer heaters to supply hot oil to the new product molybdenite dryer. New Source Performance Standards (NSPS) Subpart LL (Standards of Performance for Metallic Mineral Processing Plants) apply to this source. Title V of the 1990 Clean Air Act applies to this source. Salt Lake County is a non-attainment area of the National Ambient Air Quality Standards (NAAQS) for  $PM_{10}$  and  $SO_2$ , and is a maintenance area for ozone. The KUCC Copperton Concentrator is also included as a regulated  $PM_{10}$  source in the Salt Lake County  $PM_{10}$  State Implementation Plan (SIP). This AO modification will result in a modification to the existing SIP limits. Therefore, this modification will require approval by the Air Quality Board. The emissions will decrease in tons per year (tpy) as follows:  $PM_{10}$  = 1.19,  $SO_2$  = 86.30,  $NO_x$  = 6.95, CO = 5.84, VOC = 23.38. The changes in emissions will result in the following, in tons per year, potential to emit totals:  $PM_{10}$  = 7.35,  $SO_2$  = 0.10,  $NO_x$  = 10.75, CO = 9.06, and VOC = 2.32." Subsection IX.H.2.j will be modified to remove paragraph (2) Copperton Concentrator. IX.H.2.k. KENNECOTT POWER PLANT AND TAILINGS IMPOUNDMENT. (1) For the Power Plant: COMMENT # 85a. Subsection IX.H.2.k.(1)(a) should be re-arranged to make clear what fuel consumption limits (or emission limits) apply to the Power Plant outside of the period Nov-Feb. {Comment made by the EPA} RESPONSE: UDAQ agrees, and will insert the appropriate conditions from the most recent Approval Order. See revised construct of Section IX.H.2.k.(1) below. COMMENT # 85b. In condition (a)(ii), the fuel limits should be expressed in terms of Btu/day, not volume or weight of fuel. The language should match that used in the revised Approval Order [NOTE: the new Approval order was approved by the Air Quality Board on May 11, 2005.] {Comment made by Kennecott} RESPONSE: UDAQ agrees, and will insert the appropriate conditions from the most recent Approval Order. See revised construct of Section IX.H.2.k.(1) below. COMMENT # 85c. Regarding Kennecott's Power Plant (IX.H.2.k), We request that (a) - (e) be added after requirements in the first sentence. {Comment made by Kennecott} RESPONSE: UDAQ agrees in concept, but will instead add the appropriate clarification into this statement. Note that the summertime limits will be included as well (see comment 85a above). See revised construct of Section IX.H.2.k.(1) below. COMMENT # 85d. In conditions (a)(iii) and (iv), "and concentrations" should be deleted because all the limits for all sources in Part H are in tons/day. {Comment made by Kennecott} RESPONSE: UDAQ agrees. See revised construct of Section IX.H.2.k.(1) below. COMMENT # 85e. Subsection IX.H.2.k.(1)(e) says metering of natural gas to the boilers "shall be installed if necessary." This same language appears in the original 1991  $PM_{10}$  SIP. Thirteen years has passed, and the State should make a determination. {Comment made by the EPA} RESPONSE: UDAQ agrees, and will insert the appropriate language from the most recent Approval Order, which no longer includes this option. Note that this language (paragraph (f)) is slightly different than what was proposed given that the fuel consumption limits are now expressed in terms of MMBTU per day. See revised construct of Section IX.H.2.k.(1) below. COMMENT # 85f. Subsection

IX.H.2.k.(1)(f) says that the requirements in IX.H.2.k.(1) for the Power Plant apply "unless and until" a Notice of Intent is submitted for "specific technologies" and an Approval Order is issued. This subsection goes on to discuss the Approval Order and the Title V Operating Permit. The entire subsection IX.H.2.k.(1)(f) is unacceptable and must be removed. PM<sub>10</sub> SIP requirements cannot be made contingent on issuance of Approval Orders, nor can Approval Orders supersede the PM<sub>10</sub> SIP. Treatment of requirements in permits that might serve as alternatives to SIP requirements is already addressed in section IX.H.3. of the PM<sub>10</sub> Maintenance Plan. {Comment made by the EPA} RESPONSE: Subsection IX.H.2.k.(1)(f), as proposed, requires the issuance of an Approval Order as only one of a sequence of events that would need to occur in order to alter the proposed SIP requirements. As foreseen, this process would need to address a RACT determination made in the original PM<sub>10</sub> SIP, whereby the Utah Power Plant was required to burn natural gas during the winter. That determination was made fifteen years ago when the price of natural gas was significantly lower than it is at the present. Given today's economics, it may be for example that the combination of a baghouse with lime injection and low NO<sub>x</sub> burners would represent a more economical RACT (with summertime benefits for ozone as well). Since the CAA requires RACT, at a minimum, to demonstrate attainment/maintenance of the NAAQS, the emissions from such technology would have to be modeled to ascertain as much. Such modeling has also been included as a necessary step in paragraph (f), yet no such requirement exists in section IX.H.3. RACT however is less stringent than BACT, and this is precisely why the Approval Order process, as outlined in R307-401, has been included as a necessary step in this process. R307-401 requires a BACT analysis as part of any Approval Order issued by the Executive Secretary. Should the Executive Secretary be able to make such a finding and issue an AO, the BACT requirements would then be eligible for inclusion in a Part 70 permit, just as is required by section IX.H.3. The Part 70 process would give the EPA veto authority over any such permit, approval of which is yet another required element in the process outlined in paragraph (f). It is not until the Part 70 permit becomes effective, after approval by EPA, that the requirements contained therein would supersede the requirements in the SIP. Hence, UDAQ disagrees with the comment, and will leave the condition as proposed. COMMENT # 85g. Finally, Kennecott agrees with UDAQ's approach for addressing future RACM by specifying how such a modification would be adopted as part of an Approval order, Title V permit, and incorporation into the SIP. Specifically, concurs with condition (f)(vii) that incorporates into the SIP only the Title V provisions that are appropriate for the SIP. However, the new section IX.H.3 does not address the circumstance where the SIP specifies the process for RACM (RACT) modification. It appears that IX.H.3 would create an inconsistency with subsection (f) in IX.H.2.k. We recommend adding the following sentences at the end of IX.H.2.k.(1)(f)(vii): "As of the effective date of the Operating Permit, the PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emission limits for the Utah Power Plant boilers, including applicable monitoring requirements, set forth in that permit as most recently amended, shall become incorporated by reference into the Utah SIP. Henceforth, those terms and conditions specified in the operating Permit shall supersede conditions (a) - (e) above. The implementation of this subsection (f) shall not require compliance with the provisions of Subsection IX.H.3." {Comment made by Kennecott} RESPONSE: The procedure outlined in condition H.2.k.(1)(f) establishes a process that could be used to establish a new RACT determination for the Kennecott Power Plant. If this procedure is followed, then Kennecott will be in compliance with the SIP and it will not be necessary for Kennecott to establish an alternative requirement under Subsection IX.H.3. The suggested language is not necessary in this case. Provided below is a markup copy of the proposed Subsection IX.H.2.k.(1) which reflects the responses to comments # 85 a-g. "k. KENNECOTT UTAH COPPER: POWER PLANT and TAILINGS IMPOUNDMENT. (1) UTAH POWER PLANT. The following requirements, subsections (a) through (f), are applicable unless and until the owner/operator has complied with the requirements set forth in Subsection (g) below. (a) During the period from November 1, to the last day in February, inclusive, the following conditions shall apply: (i) The four boilers shall

use only natural gas as a fuel, unless the supplier or transporter of natural gas imposes a curtailment. The power plant may then burn coal, only for the duration of the curtailment plus sufficient time to empty the coal bins following the curtailment. (ii) Fuel usage shall be limited to the following: (A) 42,706 MMBTU per day of natural gas; (B) 31,510 MMBTU per day of coal, only during curtailment of natural gas supply. (iii) Natural gas used as fuel: Except during a curtailment of natural gas supply, emissions to the atmosphere from the indicated emission point shall not exceed the following rates: (A) For each of boilers no. 1, 2, & 3:  $\text{NO}_x$  1.91 ton/day. (B) For boiler no. 4:  $\text{NO}_x$  3.67 ton/day. (iv) Coal used as fuel: Emissions to the atmosphere from the indicated emission point shall not exceed the following rates: (A) For each of boilers no. 1, 2, & 3: (I)  $\text{PM}_{10}$  0.208 ton/day; (II)  $\text{NO}_x$  2.59 ton/day; (B) For boiler no. 4: (I)  $\text{PM}_{10}$  0.402 ton/day; (II)  $\text{NO}_x$  4.52 ton/day. (v) Owner/operator shall provide monthly reports to the Executive Secretary showing daily total emission estimates based upon boiler usage, fuel consumption and previously available results of stack tests. (b) During each annual period from March 1 to October 31, inclusive, the following conditions shall apply: (i) KUCC shall use coal, natural gas, oils that meet all the specifications of 40 CFR 266.40(e) and contains less than 1000 ppm total halogens, and/or number two fuel oil or lighter in the boilers. (ii) The following limit on fuel usage shall not be exceeded: 50,400 MMBTU per day of heat input. (iii) Emissions to the atmosphere from each emission point shall not exceed the following rates and concentrations: (A) For each of boilers no. 1, 2 & 3: (I)  $\text{PM}_{10}$  0.208 ton/day; (II)  $\text{NO}_x$  2.59 ton/day; (B) For boiler no. 4: (I)  $\text{PM}_{10}$  0.402 ton/day; (II)  $\text{NO}_x$  4.52 ton/day. (c) Stack testing to show compliance with the above emission limitations shall be performed as follows for all four boilers and the following air contaminants: Pollutant and Testing Frequency: (i)  $\text{NO}_x$  every year; (ii)  $\text{PM}_{10}$  every year. The heat input during all compliance testing shall be no less than 90% of the design rate. To determine mass emission rates (ton/day) the pollutant concentration as determined by the appropriate methods shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation. The limited use of natural gas during startup, for maintenance firings and break-in firings does not constitute operation and does not require stack testing. (d) Visible emissions from the boiler stacks shall not exceed the associated opacity on a six-minute average, based on 40 CFR 60, Appendix A, Method 9, or as measured by a Continuous Opacity Monitor except as provided for in R307-201-1(7): (i) Natural Gas as Fuel 10% opacity. (ii) Coal as Fuel 20% opacity. (e) The sulfur content of any fuel burned shall not exceed 0.52 lb of sulfur per million Btu (annual running average), nor shall any one test exceed 0.66 lb of sulfur per million Btu. The owner/operator shall submit monthly reports of sulfur input to the boilers. The reports shall include: sulfur content, gross calorific value and moisture content of each gross coal sample, the gross calorific value of all coal and gas, the total amount of coal and gas burned, and the running annual average sulfur input calculated at the end of each month of operation. (f) To determine compliance with a daily limit owner/operator shall calculate a daily limit. The BTU limit shall be determined by monitoring the daily natural gas, and/or coal consumption and multiplying that value with the BTU rating of the fuel consumed. The natural gas BTU used shall be that value supplied by the natural gas vendor from the previous months bill. The BTU limit for coal shall be determined by monitoring the daily coal consumption and multiplying that value with the coal BTU rating. KUCC shall provide test certification for each load of coal received. Test certification for each load received shall be defined as test once per day for coal received that day from each supplier. Certification shall be either by their own testing or test reports from the coal marketer. Records of BTU fuel usage shall be kept on a daily basis. (g) The requirements set forth in conditions (a) – (f) above shall apply at the Utah Power Plant unless and until the following occur: (i) A Notice of Intent is submitted to the Executive Secretary, pursuant to the procedures of R307-401, that describes the specific technologies that will be used. (ii) An Approval Order is issued that authorizes implementation of the approach set forth in the Notice of Intent. (iii) Notwithstanding the requirements specified in R307-401, the Notice of Intent must



demonstrate that the technologies specified in the Approval Order would represent Reasonably Available Control Measures (RACM), as required by Section 172(c)(1) of the Clean Air Act. (iv) To the extent that the current SIP requirements outlined above in conditions (a) - ~~[(f)]~~~~[(e)]~~ above have been relied upon by the Utah SIP to satisfy Section 172(c)(4) or Section 175A(a) of the Clean Air Act, demonstrate that the technologies specified in the Approval Order would also provide for attainment or maintenance of the National Ambient Air Quality Standards. The demonstration required in this paragraph may incorporate modeling previously conducted by the State for the purpose of a maintenance demonstration. (v) The technologies specified in the Approval Order have been installed and tested in accordance with the Approval Order. (vi) The terms and conditions of the Approval Order implementing the approach set forth in the Notice of Intent have been incorporated into a Title V Operating Permit, in accordance with R307-415. (vii) As of the effective date of the Operating Permit, the PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub> emissions limits for the Utah Power Plant boilers, including applicable monitoring requirements, set forth in that permit as most recently amended, shall become incorporated by reference into the Utah SIP. Henceforth, those terms and conditions specified in the Operating Permit shall supersede conditions (a) - (f) above." FOR THE TAILINGS IMPOUNDMENT: COMMENT # 86a. The approach of incorporating the Title V permit by reference (IBR) is not acceptable, for several reasons. First, no specific edition of the Title V permit is referenced. Second, Utah can amend the Title V permit without going through a SIP revision process. Third, the Title V permit expires after 5 years. Fourth, there is considerable language in the Title V permit about other Kennecott operations that is extraneous to the Tailings Impoundment. This IBR approach is also unacceptable because the Federal Register notice that EPA will be publishing on the PM<sub>10</sub> Maintenance Plan must reference a SIP submittal that contains the requirements directly, not reference a submittal that references other documents for source-specific requirements. We are aware that UDAQ proposes to issue an updated AO for the Tailings Impoundment, after presenting it to the Utah Air Quality Board for approval in May of 2005. The draft AO has already gone through public comment period. We have examined the draft AO and find that AO conditions 9 through 21, along with Appendix A of the AO, are specific requirements that should be included in section IX.H.2.k.(2) of the PM<sub>10</sub> Maintenance Plan. {Comment made by the EPA} COMMENT # 86b. Part A, page 34, line 20 says "The terms of this dust plan have been incorporated into the SIP at Section IX, Part H." The specific requirements for the North Tailings Impoundment should be explicitly incorporated into Part H, not incorporated by reference along with everything else in the Title V permit. For all sources except the Kennecott Tailings Impoundment, UDAQ has removed all but essential detail from the SIP; Kennecott recommends the same approach be used for the Tailings Impoundment. The items that should be included in the emissions limits address the cycle time, the tailings distribution system, revegetation of the North Impoundment, dust from the embankment, stabilization methods, and requirements for a temporary or permanent shutdown. {Comment made by Kennecott} RESPONSE: UDAQ staff recommends including specific conditions for the Kennecott Tailings Impoundment in Part H of the PM<sub>10</sub> SIP as suggested in the above comments. Recommended Staff SIP conditions incorporate all of the above except for the incorporation of Appendix A (Fugitive Dust Plan). Appendix A was not included for the following three reasons: 1) Many of the conditions in the Fugitive Dust Plan duplicate the conditions already found in the SIP. 2) Many of the conditions in the Fugitive Dust Plan have little or no bearing on dust control and the site. 3) Many of the conditions in the Fugitive Dust Plan provide information and requirements that are not appropriate to be included in the SIP. The following is the recommended language to be incorporated in Part H of the PM<sub>10</sub> SIP: "Section IX, Part H.2.k. (2) TAILINGS IMPOUNDMENT: (a) Visible emissions caused by fugitive dust shall not exceed 10% at the property boundary, and 20% onsite except during periods when wind speeds exceed the value specified in UAC R307-309 and control measures in the most recently approved dust control plan are being taken. The fugitive dust control plan shall utilize the fugitive dust control strategies



listed in UAC R307-205 and R307-309. (b) Kennecott shall submit reports and conduct on site inspections on the fugitive dust abatement program activities for the executive secretary as specified in the most current Approval Order and operating permit. (c) All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed or chemically treated to control fugitive dust. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist or crusted condition. (d) On the North Tailings Impoundment, as the embankment cells are filled during continual raising of the embankment, dust shall be controlled by the inherent high water content of the hydraulically placed cyclone underflow. Portions of the embankment that are not under active construction shall be kept wet or tackified by applying chemical stabilizing agents or water pumped from the toe ditch. Newly formed exterior slopes shall be stabilized with chemical stabilizing agents or vegetation. (e) Disturbed or stripped areas of the North Tailings Impoundment shall be kept sufficiently moist during the project to minimize fugitive dust. This control, or other equivalent control methods, shall remain operational during the project cycle and until the areas have been reclaimed. The control methods used shall be operational as needed 24 hours per day, 365 days per year or until the area has been reclaimed. (f) The minimum cycle time required for wetting all interior beach areas of the North Impoundment between February 15 and November 15 shall be at least every four days. (g) On the North Tailing Impoundment Kennecott shall conduct wind erosion potential inspections monthly between February 15 and November 15. The tailings distribution system consisting of the North Tailing Impoundment shall be operated to maximize surface wetness. Wind erosion potential is the area that is not wet, frozen, vegetated, crusted or treated and has the potential for wind erosion. No more than 50 contiguous acres or more than 5% of the total North tailings area shall be permitted to have the potential for wind erosion. If it is determined that the total surface area with the potential for wind erosion is greater than 5%, or at the request of the Executive Secretary, inspections shall be conducted once every five working days. Kennecott shall immediately initiate the revised inspection schedule and the results reported to the Executive Secretary within 24 hours of the inspection. The schedule shall continue to be implemented until Kennecott measures a total surface with the potential for wind erosion of less than or equal to 5%. If Kennecott or the Executive Secretary, determines that the percentage of wind erosion potential is exceeded, Kennecott shall meet with the Executive Secretary, or Executive Secretary's staff, to discuss additional or modified fugitive dust controls/operational practices, and an implementation schedule for such, within five working days following verbal notification by either party. (h) On the closed South Tailings Impoundment Kennecott shall conduct wind erosion potential inspections on inactive non-reclaimed areas monthly between February 15 and November 15. No more than 50 contiguous acres or more than 5% of the South Tailings impoundment tailings area shall be permitted to have the potential for wind erosion. Wind erosion potential is the area that is not wet, frozen, vegetated, crusted or treated and has the potential for wind erosion. Inactive but non-reclaimed areas are to be stabilized by chemical stabilizing agents, ponded water, sprinklers, vegetation or other methods of fugitive dust control. If it is determined by Kennecott or the Executive Secretary, that the total surface area with the potential for wind erosion is greater than 5% of total tailings area, or at the request of the Executive Secretary, inspections shall be conducted once every five working days. Kennecott shall immediately initiate the revised inspection schedule and the results reported to the Executive Secretary within 24 hours of the inspection. The schedule shall continue to be implemented until Kennecott measures a total surface with the potential for wind erosion of less than or equal to 5% total tailings area. If Kennecott or the Executive Secretary, determines that the percentage of wind erosion potential is exceeded, Kennecott shall meet with the Executive Secretary, or Executive Secretary's staff, to discuss additional or modified fugitive dust controls/operational practices, and an implementation schedule for such, within five working days following verbal notification by either party. (i) Exterior tailings impoundment areas determined by Kennecott or the executive secretary to be sources of excessive fugitive dust shall be stabilized through vegetation

cover or other approved methods. The exterior tailings surface area of the North Impoundment shall be re-vegetated or stabilized so that no more than 5% of the total exterior surface area shall be subject to wind erosion. (j) If between February 15 and November 15 of each calendar year Kennecott's weather forecast is for a wind speed at more than 25 mph for more than one hour within 48 hours of issuance of the forecast, the procedures listed below shall be followed: A. Alert the DAQ promptly. B. Continue surveillance and coordination. (k) If a temporary or permanent shutdown occurs that would affect any area of the Kennecott Tailings Impoundment, Kennecott shall submit a final dust control plan for all areas of the Tailings Impoundment to the Executive Secretary for approval at least 60 days prior to the planned shutdown. IX.H.2.1. KENNECOTT SMELTER & REFINERY. FOR THE SMELTER: COMMENT # 87a. Subsection IX.H.2.1.(1)(a)(i)(B) lists allowable SO<sub>2</sub> emissions at the main stack as 5,700 lb/hr on a 24-hour average and 3,240 lb/hr on an annual average. These are the same allowable emissions listed in the 1991 PM<sub>10</sub> SIP. After the original PM<sub>10</sub> SIP was promulgated, Kennecott modernized the smelter and banked the emission reductions. (Reference: State "banking order" to Kennecott dated June 9, 1999, lists 17,685.50 tons per year of banked SO<sub>2</sub> emissions.) Since the current Approval Order for the Smelter allows only 211 lb/hr on an annual average, it appears that 13,267 tons per year of banked SO<sub>2</sub> emissions are to be given back to Kennecott, in terms of increased allowable emissions at the main stack:  $(3240 - 211) \text{ lb/hr} \times 8760 \text{ hr/yr} / 2000 \text{ lb/ton} = 13,267 \text{ tons/yr increase}$ . It is our understanding that the State intends to allow these 13,267 tons/yr of emissions to also remain in the bank, available for sale from Kennecott to other sources. This constitutes double-counting of emission credit and is not acceptable. {Comment made by the EPA} RESPONSE: The larger limits were included in Part H with the idea of preserving the banked emissions (ERCs). The thinking was that if they had not been relied upon then it might be construed that the difference between the limits in the AO and those in the SIP was no longer creditable. What was actually modeled however, was the smaller limits plus the banked ERCs. These then add back up to the higher limits. Since the banked ERCs were included in the modeling, they were relied upon in the demonstration. So long as this is generally understood, then UDAQ agrees with EPA, and will put the lower limits into the SIP. See revised construct of Section IX.H.2.1.(1)(a)(i) below. COMMENT # 87b. Also, there appears to be conflicting information in the PM<sub>10</sub> Maintenance Plan regarding what SO<sub>2</sub> emission rate at Kennecott's main stack was used for modeling. Volume VII of the Technical Support Document, at page 3.b.iv-1, says that, regarding "the SO<sub>2</sub> emission credits attributed" to the Kennecott smelter, "4,328 tpy was modeled at ground level, like all other banked emissions, but the remaining 12,567 tpy was modeled as if they were emitted from the 1,200 foot tall stack." Page 3.b.iii-120, however, lists the "modeled PTE" for SO<sub>2</sub> at 867.22 tons/yr for "Smelter - Fugitives," 867.22 tons/yr for "Copper smelting (main stack)" and 213.16 tons/yr for "recycle and crushing." The total is only 1,947.6 tons/yr of SO<sub>2</sub> emissions. The State should explain, and reconcile if necessary, the apparent discrepancy between these two pages of the Maintenance Plan. {Comment made by the EPA} RESPONSE: There is no discrepancy between the totals described in the comment. The SO<sub>2</sub> emission credits attributed to the Kennecott Smelter, described at Volume VII of the Technical Support Document, at page 3.b.iv-1, are the banked emissions or ERCs presently held by Kennecott. The origin of the ERCs from the smelter could be grouped into two categories; ground level "fugitive" emissions and 2) emissions emanating directly from the 1,200 foot stack (see existing SIP; Table IX.A.13, page 4 of 5 for distinction). In the model, 4,328 tpy was represented as low-level SO<sub>2</sub> and 12,567 tpy was assigned to the 1,200 foot stack. The model also included allowable emissions from the smelter. These emissions are documented at page 3.b.iii-120, and do in fact show 1,947.6 tons/yr of SO<sub>2</sub> emissions (867.22 tons/yr for "Smelter - Fugitives," 867.22 tons/yr for "Copper smelting (main stack)" and 213.16 tons/yr for "recycle and crushing.") However, as pointed out in Comment # 100, this total has incorrectly "double-counted" the 867.22 tons/yr of emissions from the smelter. If this error had underestimated the inventory, DAQ would have re-run the modeling analysis

using the correct numbers. Because the change overestimated emissions, the conclusions of the analysis are not affected. See also the response to comment #100. COMMENT # 87c. Subsection IX.H.2.1.(1)(a)(ii) proposes an allowable SO<sub>2</sub> concentration in acid plant tailgas of 1,050 ppmdv on a 3-hr rolling average. No other ppmdv limits are proposed for the acid plant. This is not acceptable. The original PM<sub>10</sub> SIP specified 650 ppmdv on a 6-hr average as RACT. We have no information to suggest that 1,050 ppmdv on a 3-hr average should be considered at least as stringent as 650 ppmdv on a 6-hr average. We are aware that EPA approved a revision to the SO<sub>2</sub> SIP several years ago that included a figure of 1,050 ppmdv on a 3-hr average, but that SIP revision also retained the figure of 650 ppmdv on a 6-hr average (i.e., both limits must be met, not just the 1,050). EPA has never approved the removal of the 650 ppmdv limit. Considering that the current Approval Order for the Smelter, dated December 22, 2000, allows only 250 ppmdv on a 6-hr average, 170 ppmdv on a 24-hr average, and 100 ppmdv on an annual average, we consider 650 ppmdv on a 6-hr average to be easily achievable and see no justification to remove it from the SIP. {Comment made by the EPA} RESPONSE: The limit of 1,050 ppmdv SO<sub>2</sub> on a 3-hr average was retained for the purpose of the SO<sub>2</sub> plan. Recall that for the SO<sub>2</sub> NAAQS there is a 3-hr secondary standard of 0.5 ppm. For PM<sub>10</sub>, it was felt that, in general, there was no need for a limit on the acid plant tail-gas concentration since these emissions are ultimately released from the 1,200 foot stack, and there are already mass emission limits governing that release point. Nevertheless, EPA makes a good point that the tail-gas concentration was a significant element of the original RACT determination for the PM<sub>10</sub> SIP. UDAQ concurs that the 6-hr. limit of 650 ppmdv should be retained in Part H, and will make the necessary addition. See revised construct of Section IX.H.2.1.(1)(a)(ii) below. COMMENT # 87d. Subsection IX.H.2.1.(1)(c)(i) says Kennecott "shall calibrate, maintain and operate the measurement systems for continuously monitoring SO<sub>2</sub> and NO<sub>x</sub> concentrations and stack gas volumetric flow rates in the main smelter stack." This language is not specific enough for practical enforceability. This subsection should include the language from condition 10 of the current AO dated December 22, 2000. {Comment made by the EPA} RESPONSE: UDAQ agrees that additional specificity is needed, but does not think that the language from the Approval Order is necessary. There are other instances within the proposed Part H where CEMs are required to demonstrate compliance with various emission limits. In every such case, (Chevron's and Flying J's and Holly's say "that meets the requirements of R307-170." Tesoro's says "...that meets or exceeds the requirements contained in 40 CFR 60, Appendix B, Performance Specification 2." Pacificorp (Gadsby's) says "...as required by 40 CFR Part 75 for the Acid Rain Program.") a reference was made to an existing regulation that already contains such details. UDAQ will add the appropriate reference to Subsection IX.H.2.1.(1)(c)(i). See revised construct of Section IX.H.2.1.(1)(c)(i) below. COMMENT # 87E. Regarding the Kennecott Smelter (IX.H.2.1), we see no rationale for keeping the opacity limit for the acid plant tailgas, because the gas is SO<sub>2</sub> and it is invisible. The 15% opacity limit will remain in the Approval Order and the Title V permit, and the NSPS opacity limit continues to apply. We request that condition (d)(ii) and the reference to tailgas in condition (d)(iii) be deleted. {Comment made by Kennecott} RESPONSE: UDAQ agrees that this condition is not necessary as part of the SIP. The acid plant tailgas is ducted to the 1,200 foot stack which has an opacity limit at its release to the atmosphere. See revised construct of Section IX.H.2.1.(1)(d) below. COMMENT # 87f. In condition (c)(ii), first line, change "permittee" to "owner/operator." {Comment made by Kennecott} RESPONSE: UDAQ agrees, and will make the necessary revision. See revised construct of Section IX.H.2.1.(1) below. COMMENT # 87g. Condition (e) has been copied directly from the Title V permit and reads like a permit; subpart (iii) can be deleted, and perhaps subpart (i) as well. If subpart (i) is kept, delete for this permit condition. {Comment made by Kennecott} RESPONSE: UDAQ agrees, and will make the necessary revisions. See revised construct of Section IX.H.2.1.(1) below. COMMENT # 87h. In the last paragraph of condition (f), the reference should be corrected (f), not (g). {Comment made by

Kennecott] RESPONSE: UDAQ agrees, and will make the necessary revision. See revised construct of Section IX.H.2.1.(1) below. Provided below is the revised Subsection IX.H.2.1.(1) which reflects the responses to comments # 87 a-h: "1. KENNECOTT UTAH COPPER: SMELTER and REFINERY. (1) SMELTER: (a) Emissions to the atmosphere from the indicated emission points shall not exceed the following rates and concentrations: (i) Main Stack (Stack No. 11) (A)  $PM_{10}$  89.5 lbs/hr (24 hr. average). (B)  $SO_2$  (I) 552 lbs/hr (3 hr. average - rolling); (II) 422 lbs/hr (24 hr. average - calendar day); (III) 211 lbs/hr (annual average). (C)  $NO_x$  35.0 lbs/hr (annual average). (ii) Acid Plant Tail Gas.  $SO_2$  (I) 1,050 ppmdv (3 hr. rolling average); (II) 650 ppmdv (6 hr. rolling average). All annual average emissions limits shall be based on rolling 12-month averages. Based on the first day of each month, a new 12-month total shall be calculated using the previous 12 months. Reference to stack in Condition #1 above and Condition #2 below may not necessarily refer to an exhaust point to the atmosphere. Many emission sources are commingled with emissions from other sources and exit to the atmosphere from a common emission point. "Stack" in these conditions refers to the point prior to mixing with emissions from other sources. (b) Stack testing to show compliance with the emissions limitations of Condition (a) above shall be performed as specified below: Emission Point, Pollutant, and Test Frequency: (i) Main Stack:  $PM_{10}$ , every year (Stack No. 11);  $SO_2$  CEM;  $NO_x$  CEM. (ii) Acid Plant Tailgas,  $SO_2$ , CEM. (c) Testing Status (To be applied to (a) and (b) above) (i) To demonstrate compliance with the main stack mass emissions limits for  $SO_2$  and  $NO_x$  of Condition (a)(i) above, KUC shall calibrate, maintain and operate the measurement systems for continuously monitoring  $SO_2$  and  $NO_x$  concentrations and stack gas volumetric flow rates in the main smelter stack. Such measurement systems shall meet the requirements of R307-170. (ii) In addition to the stack test required to measure  $PM_{10}$  in (b) above, the owner/operator shall calibrate, maintain and operate a system to continuously measure emissions of particulate matter from the main stack. For purposes of determining compliance with the emission limit, all particulate matter collected shall be reported as  $PM_{10}$ . Compliance with the main stack emission limit for  $PM_{10}$  shall be demonstrated using the smelter main stack continuous particulate sampling system to provide a 24-hour value. The owner/operator may petition the Air Quality Board at any time to discontinue the operation of the continuous monitor. An analysis of the potential  $PM_{10}$  uncontrolled emissions from the main stack shall be submitted to the Executive Secretary at the time of such a petition. (iii) The owner/operator shall install, calibrate, maintain, and operate continuous monitoring systems on the acid plant tail gas. (iv) All monitoring systems shall comply with all applicable sections of R307-170. (v) KUC shall maintain records of all measurements necessary for and including the expression of  $PM_{10}$ ,  $SO_2$  and  $NO_x$  emissions in terms of pounds per hour. Emissions shall be calculated at the end of each day for the preceding 24 hours for  $PM_{10}$ ,  $SO_2$  and  $NO_x$  and calculated at the end of each hour for the preceding three-hour period for  $SO_2$ . Results for each measurement or monitoring system and reports evaluating the performance of such systems shall be summarized and shall be submitted to the Executive Secretary within 20 days after the end of each month. (d) Visible emissions from the following emission points shall not exceed the following values: (i) Smelter Main Stack (stack 11), 20% opacity. (ii) Sources equipped with continuous opacity monitors (acid plant tailgas and main stack) shall use the compliance methods contained in 40 CFR 60.11. (e) All gases produced during smelting and/or converting which enter the primary gas handling system shall pass through an online sulfuric acid plant. During the start-up/shutdown process of any equipment, the gas emissions shall be ducted, as necessary, either to the acid plant or to the secondary scrubber for control. (i) A log shall be kept of any time the gases produced during smelting and/or converting are not passed through an online sulfuric acid plant. An additional log shall be kept and include the dates, times and durations of all times any gases from smelting and/or converting bypass both the acid plant and the secondary gas system. The log will serve as the monitoring requirement. (f) The owner/operator shall employ the following measures for reducing escape of pollutants to the atmosphere and to capture emissions and vent them through a stack or stacks: (i)

Maintenance of all ducts, flues, and stacks in such a fashion that leakage of gases to the ambient air will be prevented to the maximum extent practicable. (ii) Operation and maintenance of gas collection systems in good working order. (iii) Making available to the Executive Secretary the preventive/routine maintenance records for the hooding systems, dust collection mechanism of waste heat boilers, furnace wet scrubbing systems, and dry electrostatic precipitators. (iv) Weekly observation of process units. (v) Monthly inspection of gas handling systems. (vi) Maintenance of gas handling systems, available on call on a 24-hour basis. (vii) Operation and maintenance of an upwind/downwind fugitive monitoring system. The owner/operator may petition the Executive Secretary to discontinue the operation of this system. (viii) Contained conveyance of acid plant effluent solutions. Within 90 days of approval of these conditions, KUC submitted to the Division examples of the forms and records that will be used to comply with Conditions (f) (iv) and (v) above. KUC may modify these forms and records after approval in accordance with R307-401-1. (g) Secondary hoods and ventilation systems shall be installed on the following points to capture fugitive emissions into the secondary ventilation system or other approved pollution control devices: (i) Concentrate Dryer Feed Chute. (ii) Slag and Matte Granulators. (iii) Smelting and Converting Furnaces. (iv) Slag Pot Filling Stations." FOR THE REFINERY: COMMENT # 88. The KUC Refinery should have one limit on NO<sub>x</sub> that covers both boilers combined, as is done for petroleum refineries, the Gadsby Power Plant, and several small power plants. There should not be a separate limit for each boiler. {Comment made by Kennecott} RESPONSE: UDAQ agrees, and will revise the language to read as follows: "(a) Emissions to the atmosphere from the indicated emission point shall not exceed the following rate: Emission Point and Maximum Emission Rate: The sum of Two (Tankhouse) Boilers 0.11 tons NO<sub>x</sub> / day" IX.H.2.m. PACIFICORP GADSBY POWER PLANT. COMMENT # 89a. Subsection IX.H.2.m.(1) contains a daily plantwide NO<sub>x</sub> emission limit but no 12-month plantwide NO<sub>x</sub> emission limit. It is not clear to us why. RESPONSE: The annual limit was redundant. See the response to comment #79 for a more complete explanation. COMMENT # 89b. Also, the fourth sentence in subsection IX.H.2.m.(1) is redundant with the third sentence and should be deleted. RESPONSE: UDAQ agrees with this comment. The redundant sentence will be removed. COMMENT # 89c. Subsection IX.H.2.m.(2) contains a 12-month plantwide PM<sub>10</sub> emission limit but no daily plantwide PM<sub>10</sub> emission limit. It is not clear to us why. RESPONSE: The sources in question (three primary boilers and three combustion turbine/generators) burn nothing but natural gas, and as such have never been subject to an hourly PM<sub>10</sub> limitation. COMMENT # 89d. Also, this subsection says that PM<sub>10</sub> emissions from all boilers and turbines shall be determined by using emission factors from AP-42. It is not clear to us why PM<sub>10</sub> stack tests should not be required, at least at a representative boiler and turbine, if not all boilers and turbines. {Comments made by the EPA} RESPONSE: PM<sub>10</sub> emission estimates for this source are based on AP-42 emission factors. This is reflected in the most recent AO for the source (DAQE-204-02, now incorporated into Title V permit #3500068001). The combustion of natural gas is well understood and documented, and little change in PM<sub>10</sub> emissions are anticipated with regular maintenance. The pollutants of concern for this source are NO<sub>x</sub> and CO, and stack testing is required to verify compliance with those limits. IX.H.2.p. SPRINGVILLE CITY CORP. COMMENT # 90. Subsection IX.H.2.p.(2) says "The owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months." This conflicts with the General Requirement at IX.H.1.b, which says "By the last day of each month..." This subsection for Springville City Corp. should refer back to the General Requirements. {Comment made by the EPA} RESPONSE: UDAQ agrees with this comment. The source specific requirement will be changed to read as follows to agree with the general requirements: "(2) Compliance with the above limitations shall be determined by a continuous emissions monitoring system (CEM) meeting the requirements of R307-170. Daily NO<sub>x</sub> emissions shall be calculated for each individual engine and summed into a monthly output. The monthly outputs shall be summed into a rolling 12-month total of NO<sub>x</sub> in

tons/year. The owner/operator shall calculate a new 12-month total by the last day of each month using data from the previous 12 months. Records of emissions shall be kept for all periods when the plant is in operation." IX.H.2.q. TESORO WEST COAST. COMMENT # 91. Subsection IX.H.2.q.(1) does not contain a 12-month limit on plantwide PM<sub>10</sub> emissions. It is not clear to us why another refinery in IX.H.2. (Flying J) would have a 12-month limit but Tesoro would not. {Comment made by the EPA} RESPONSE: During the NSR review for DAQE-694-97, emission limits were reviewed. The annual limit for PM<sub>10</sub> was equivalent to and redundant with the daily limit. In preparation for title V permits, redundant limits were removed, including the limit addressed here, and only the shorter-term limits were retained. IX.H.2.r. WEST VALLEY POWER PLANT. COMMENT # 92. A daily plantwide NO<sub>x</sub> limit is proposed, but no 12-month plantwide NO<sub>x</sub> limit. It is not clear to us why not. {Comment made by the EPA} RESPONSE: The annual limit was redundant. See the response to comment #79 for a more complete explanation. SIP SECTION IX.H.3 – ESTABLISHMENT OF ALTERNATIVE REQUIREMENTS: COMMENT # 93. On page 33, Section IX.H.3.a – These paragraphs generally track the language in Attachment B of White Paper No. 2, but omits the following: "Noncompliance with any provision established by this rule constitutes a violation of this rule." We think it is possible to change this language somewhat, but that it is necessary to make explicit that violation of a substitute provision constitutes a violation of the SIP. We suggest inserting the following language after the first two paragraphs on page 33: "Noncompliance with any provision established under this provision shall constitute a violation of the state implementation plan." {Comment made by the EPA} RESPONSE: UDAQ agrees, and will add the following sentence at the end of Subsection IX.H.3.a. "Noncompliance with an alternative requirement approved under this plan shall constitute a violation of the underlying SIP condition that was established in Subsections IX.H.1 or 2 of this plan." COMMENT # 94. On page 33, Section IX.H.3.b(1)g – UDAQ needs to add a question mark. {Comment made by the EPA} RESPONSE: DAQ agrees, and will make the appropriate revision. COMMENT # 95. On page 34, Section IX.H.3. – The following language should be added (at the end of b. or somewhere in c.): "If the source fails to demonstrate that the proposed alternative is as or more stringent than the provision to be replaced, the executive secretary shall disapprove the proposed alternative." {Comment made by the EPA} RESPONSE: UDAQ agrees, and will make the appropriate revision. COMMENT # 96. On page 34, Section IX.H.3.c(1): Please change to read, "A source can request an equivalent emission limitation or other requirement by submitting ..." {Comment made by the EPA} RESPONSE: UDAQ agrees, and will make the appropriate revision. COMMENT # 97. On page 34, Section IX.H.3.c(1)(b): We think it would be more appropriate for the executive secretary, rather than the source, to issue a written determination regarding relative stringency. Perhaps this section should indicate that the source should provide a "proposed written determination" regarding stringency. {Comment made by the EPA} RESPONSE: UDAQ agrees, and will make the appropriate revision. COMMENT # 98. On page 35, Section IX.H.3.c(4): Consistent with White Paper No. 2, change to read, At the time he or she transmits a source's part 70 application to EPA, the executive secretary will notify EPA if a source has requested an alternative requirement. {Comment made by the EPA} RESPONSE: UDAQ agrees, and will revise the language as shown below: "At the time the executive secretary transmits a source's part 70 application to EPA, the executive secretary will notify EPA if a source has requested an equivalent emission limitation. The executive secretary will review the request, and if the executive secretary agrees that the source has demonstrated that the alternative requirement is as or more stringent than the existing SIP requirement, the executive secretary will submit the equivalence demonstration and supporting documentation to EPA in advance of draft permit issuance. If the executive secretary disapproves the requested changes, the disapproval notice will be submitted to EPA. PM<sub>10</sub> EMISSION INVENTORY: COMMENT # 99. The State says in its description of the emission inventory that only the 24-hour standard for PM<sub>10</sub> was violated and that it is therefore the controlling standard; however, the emission inventory

provided shows only annual emission rates. In its current format, EPA cannot determine what 24-hour emission rates were used in the modeling analysis to show attainment of the 24-hour standard. For the baseline episodes, we believe UDAQ should have developed 24-hour emission inventories based on actual 24-hour emission data for episode days and included it in the PM<sub>10</sub> maintenance plan. For the projection years, we are unable to determine what 24-hour emissions rates were used for the large point sources, or whether the 24-hour emission rates that appear in Section IX, Part H are consistent with the modeling analysis. This is also relevant to the commitments made by UDAQ in its letter to the EPA dated April 18, 2002. For these reasons, we cannot currently determine the validity or adequacy of the maintenance demonstration. EPA is aware of the difficulty in obtaining this information from the SMOKE program which was initially developed for ozone modeling where individual stationary source impacts/emissions are of less importance. To help resolve this issue we will confer with EPA experts familiar with the SMOKE program, and UDAQ technical staff to try and find a simple way to extract this information from the UAM-Aero/SMOKE database. {Comment made by the EPA; # D2, includes also E3 and I4} **RESPONSE:** UDAQ began using SMOKE in 2001 with the help of its contractor, Sonoma Technology, and had its own staff members go directly to MCNC, the model developer, for training. Regarding paragraph two, comment #99, UDAQ attempted to create a 24-hour emission inventory for point sources for the base year. This was done in consultation with both Sonoma Technology and MCNC. After a number of failed attempts to process the 24-hour data through SMOKE all concurred that the model, although it was supposed to have that capability, could not process a 24-hour data set. It was decided to use the standard method that uses an annual inventory and uses the model temporal profiles to create an episode-specific, daily inventory. UDAQ modeled sources that have limitations in their permits for individual components not to exceed certain thresholds on an hourly basis in a very conservative way. Limits that are expressed, typically, in lb/hr were multiplied by 24 to get lb/day and multiplied again by 365 to get lb/year. These were converted to ton/year and then processed through SMOKE. The graphic below, with the blue background, shows lines from the SMOKE profile and cross-reference files. These files are the means by which the program uses indices and SCC identifiers to convert the annual values into hourly rates. Values reported out of SMOKE are for the point source inventory for Salt Lake County, day 5, Tuesday, February 5, 2002 episode. Values are for the base year, 2002, and one future year episode, 2005. All future year values from 2005 to 2017 are equal since they represent allowable rather than actual levels and show the considerable increase in point source emissions by using allowable levels for future years. [A description of how SMOKE operates on *individual* sources, by SCC code, to change the emissions from an annual to an hourly average input for the air quality model was attached.] SMOKE uses its own customizable report generator and at the time of model development at UDAQ the only reporting format available was for county-level emissions. This report format was created during the initial model development with the help of MCNC and the county-level format is the one that we have continued to use. Technical staff at UDAQ will work with EPA, Region 8, and provide any of the data files requested to extract more detailed information from the SMOKE output files. **COMMENT # 100.** Emissions for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC from Kennecott's main stack for 2001 were double counted and thus projected emissions used in modeling for the Smelter and Refinery are too high. This error arose from the structure of the inventory; the TSD spreadsheet entitled "Potential to Emit, 2002 PM<sub>10</sub> Modeling, Kennecott Smelter and Refinery, shows emissions from the Main Stack by two different components, "Copper Smelting (main stack)" with Fuel shown "n/a," and "Copper Smelting (main stack) with Fuel shown "natural gas." These are the same emissions. This gives the reader of the Technical Support Document the impression that the Smelter and Refinery emit more than their permits allow, and that is not true. These errors do not invalidate the modeling demonstration of maintenance of the PM<sub>10</sub> NAAQS; in fact, they make the demonstration more conservative than it needs to be. Finally, several units are labeled as "not permitted," which is not the case.



{Comment made by Kennecott} RESPONSE: UDAQ agrees, and acknowledges that the emissions from the main smelter stack at Kennecott were double-counted. This error, however, did not originate in the original 2001 emissions inventory submittal, but rather arose during manipulation of the inventory data in preparation for SIP modeling. The original submittal remains correct. As explained in Comment #87b, this error does not invalidate the conclusion that the  $PM_{10}$  standard will be maintained. The model demonstrates attainment and maintenance with the emissions that were included in the inventory. COMMENT # 101. (EPA # G1) The mobile source inventory portion of the Technical Support Document (TSD - "Supplement III-05 to the  $PM_{10}$  SIP (Maintenance Plan), Draft April 2005, Volume I of IX") notes that fugitive dust emissions from unpaved roads will be addressed in the area source inventory. However, section 1.a only addresses fugitive dust sources from paved road dust and does not include inventories from unpaved roads. Please include an emission inventory from unpaved roads in either the mobile source or area source inventory. If dust from unpaved roads is included in the transportation plans (developed by the MPOs) then the SIP must include them in the overall maintenance demonstration and as part of the motor vehicle emissions budget. These emissions must be included appropriately and consistently as either an area source or mobile source.

{Comment made by the EPA} RESPONSE: Unpaved roads are included in the area source base year inventory (see Volume III 2.c.ii(1) and (2)). They are also projected (see Volume VIII pages 3.c.iii-8 and 3.c.iii-61).  $PM_{10}$  MODELING: COMMENT # 102. In EPA's comments on the original modeling protocol we stated that the final maintenance plan should also address the annual NAAQS for  $PM_{10}$  and we suggested that an emissions-based analysis be used to demonstrate continued compliance with the standard. Annual concentrations at the North Salt Lake City monitor have been as high as 46  $\mu g/m^3$  as recently as 2000 and that in the future the standard could be threatened at that location with a small increase in local emissions. Emissions inventory projections showing a downward trend in future year emissions near the monitor would be a reasonable method to demonstrate NAAQS maintenance. Annual concentrations at the other monitors in the Salt Lake City area are well below the annual standard and the current SIP plus additional reductions to address the 24-hour NAAQS should ensure compliance with the NAAQS at these locations. {Comment made by the EPA; # E1} RESPONSE: The annual standard has been addressed at Section IX.A.10.c(1)(d). It is explained therein that the control strategy developed as part of the 1991  $PM_{10}$  SIP was based on the 24-hour NAAQS (not the annual) because that approach resulted in the more stringent control requirements. Many of the control strategies that were implemented to reduce the 24-hour  $PM_{10}$  concentrations also result in a reduction of the annual  $PM_{10}$  concentrations, particularly since the ambient data shows that the winter season is the period that has the greatest impact on the annual average. The data presented in Section IX.A.10.b(3) shows a downward trend in the annual arithmetic mean concentrations, thus corroborating the assumption made in the 1991 SIP. This is particularly important at the North Salt Lake monitor, where the values of the arithmetic mean concentrations are closest to the NAAQS (Figure IX.A.29). The downward trend in the data collected here from 1994 through 2004, representing the period of Post-SIP RACT control, may be described by a line of best fit in which the slope is  $-0.577 \mu g/m^3$  per year. For a discussion as to why the trend over this period of time is relevant to the proposed demonstration of maintenance through 2017, see the response to Comment # 46. COMMENT # 103. In the UAM-Aero modeling, banked emissions were sited in core industrial areas in the county in which they were registered and included in the modeling in 2005 and subsequent years. In general, EPA believes that this is a reasonable approach. However, 12,567 tons/yr of Kennecott's banked  $SO_2$  emissions were modeled as if they were emitted from Kennecott's 1200 foot stack. Under wintertime inversion conditions it is unlikely that pollutants emitted from a 1200 foot stack (above the persistent inversion) would be mixed to the surface and contribute to  $PM_{10}$  concentrations at the surface. These  $SO_2$  emissions should be remodeled using the same method that UDEQ used for  $NO_x$  and  $PM_{10}$ . {Comment made by the EPA; # E2} RESPONSE: These emission reduction credits were created by achieving emission rates that



were lower than what was required by the 1991 PM<sub>10</sub> SIP. The lower limits will be included in the maintenance plan (see response to comment # 87a). The banked credits were modeled so as to preserve them in the baseline for the SIP (see response to comment #26). UDAQ is implementing the nonattainment area permitting program (R307-403) in accordance with EPA's interpretation of the rule in the May 5, 1995 approval of the program. Interpollutant trading between PM<sub>10</sub>, NO<sub>x</sub> and SO<sub>2</sub> is not allowed under this rule for new major sources or major modifications. It is unlikely that 13,000 tons of SO<sub>2</sub> emission reduction credits will be used in the nonattainment area. Therefore, it would not be appropriate to model these emissions throughout the nonattainment area. When the area is redesignated to attainment for PM<sub>10</sub> and SO<sub>2</sub> the method that was used to estimate where banked emissions would be used will no longer be an issue because the PSD program will require modeling to demonstrate that any major source or major modification will not cause a violation of the NAAQS. If such modeling showed a violation of the NAAQS, the permit would not be issued. COMMENT # 104. On page 38, section IX.A.10.c(6), Says that the road dust inventory was discounted by 75% for purposes of demonstrating maintenance, but that it was not discounted for purposes of establishing motor vehicle emissions budgets. We question whether the 75% discount is appropriate. Utah must include a reasoned and valid rationale for this discount, including the air quality monitoring data and the original modeling results. Any technical reports by Sonoma Technologies, Inc. explaining this adjustment factor should be included in the TSD (at Tab 2.d.iii (3)(iii) page 17). {Comment made by the EPA; # B30, includes EPA comments # B31 and F3} RESPONSE: The inventories and budgets appropriately reflect the output of the EPA-approved mobile source model. The 75% reduction is a performance adjustment to the air dispersion model and is consistent with guidance provided in the documents identified below. These two EPA-authored documents provide valid rationale for this approach and will be included in the TSD. The second sentence in the first reference speaks to the lack of value that a comparison to monitored data would provide. Without the 75% reduction, the airshed model would significantly over-predict the primary PM component. "Conclusions. Our understanding of factors affecting particle removal near ground level fugitive dust sources has improved greatly since the late 1990.s. Models are limited in their ability to fully account for near source removal of particles for a variety of physical and practical reasons and this limitation is a major reason for the disparity between modeled and monitored estimates of fugitive dust. The Transportable Fraction concept is consistent with research on windbreaks and has been at least partially quantified by the field work of DRI and MRI. In its current form, the TF concept does provide a useful way to account for this removal process in grid models by applying a variable adjustment across the U.S. This variable adjustment is an improvement upon the national divide-by-four adjustment that has been used for several years. However, this area of research is still emerging and other approaches or assumptions may be useful, especially when considering a specific air shed. Also, it will be prudent to review the TF methodology as new studies are published." (A Conceptual Model to Adjust Fugitive Dust Emissions to Account for Near Source Particle Removal in Grid Model Applications. pg. 10, Thompson G. Pace, US EPA 8/22/2003.) "ADJUSTMENTS FOR MODELING THE NET INVENTORY. Three source types in the NET inventory were given special treatment for this modeling exercise. First, we made an adjustment to PM<sub>2.5</sub> and PM<sub>10</sub> emissions from certain fugitive source categories to remove what is termed the "non-transportable" component of these emissions. This component represents an approximation of the portion of fugitive emissions that settle out and are not dispersed more than a few meters from where they are emitted. Particulate emissions for the source categories listed in Table 1 were reduced by 75 percent to simulate the effects of this settling process. This adjustment was made because the emissions factors and activity data used in calculating fugitive emissions are designed to provide total emissions estimates whereas the nature of the processes which lead to such emissions (e.g., vehicles traveling on unpaved roads) result in much of the particle mass being deposited close to the location of the release. [Table 1 was included.] Development of an Anthropogenic Emissions

Inventory for Annual Nationwide Models-3/CMAQ Simulations of Ozone and Aerosols. pp. 3-4, Norman Possiel, et al. (Date unknown). COMMENT # 105. Documentation of Modeled Emission Rates for Stationary Sources – For the projection years, we are unable to determine what 24-hour emissions rates were used for the large point sources, or whether the 24-hour emission rates that appear in Section IX, Part H are consistent with the modeling analysis. We cannot currently determine the validity or adequacy of the maintenance demonstration. (See related comment under “PM<sub>10</sub> Emission Inventory.”) {Comment made by the EPA; # E3}

RESPONSE: See response to Comment # 99. TECHNICAL SUPPORT DOCUMENT – “SUPPLEMENT III-05 TO THE PM<sub>10</sub> SIP (MAINTENANCE PLAN), DRAFT APRIL 2005”:

COMMENT # 106. (EPA # F1) Tab 2.d.iii (1)(a) PM<sub>10</sub> Mobile Source Protocol Using MOBILE6.2, Overview, 2nd paragraph, the last sentence should be corrected to indicate PART5 was only used to model fugitive dust from paved roads and that MOBILE6.2 was used for tail pipe, brake and tire wear as noted in the maintenance plan. {Comment made by the EPA}

RESPONSE: As submitted, the PM<sub>10</sub> Mobile Source Protocol Using MOBILE6.2, Overview, 2<sup>nd</sup> paragraph is correct. PART 5 was to estimate tail pipe, brake and tire wear, not MOBILE6.2. The inventories were prepared in accordance with the EPA-approved methodology in place in October 2003. Concurrently, MOBILE6 was used to estimate tailpipe emissions of CO, NOx, and VOC only. PART5 was used to estimate road dust, SO<sub>2</sub> gas, direct tailpipe emissions of SO<sub>4</sub>, direct tailpipe emissions of particulates, brake wear and tire wear. Modeling was accomplished consistent with an EPA memo dated November 2002. At the time the Mobile Source inventories were prepared, MOBILE6 was not approved to assess emissions other than CO, NOx, and VOC. COMMENT # 107. Tab 2.d.iii (3)(iii) page 6, PART5 Model. This paragraph indicates that the February 1995 version of the PART5 model was used. AP-42 was updated in November 2003 to reflect more accurate emission factors. According to our Policy Guidance at [http://www.epa.gov/otaq/models/mobile6/mobil6.2\\_letter.pdf](http://www.epa.gov/otaq/models/mobile6/mobil6.2_letter.pdf), the 24-month grace period for using MOBILE6.2 and AP-42 for PM SIPs started May 14, 2004. The use of PART5 is satisfactory for now but we would like to make Utah aware that the use of AP-42 for fugitive dust and MOBILE6.2 for tailpipe/tire/brakes will soon be mandatory. {Comment made by the EPA; # F2} RESPONSE: The future termination of PART5 and replacement with AP-42 fifth edition is noted. The use of PART5 in this plan is consistent with the approved EPA guidance.

#### H. EPA COMMENTS REGARDING THE OUTSTANDING UDAQ APRIL 18, 2002

COMMITMENTS: COMMENT # 143. As the Utah Air Quality Board works toward adoption of a maintenance plan and a request to redesignate Utah County, Salt Lake County, and Ogden City PM<sub>10</sub> nonattainment areas to attainment, the EPA would like to remind the Board and the UDAQ of the commitments made to EPA in a letter dated April 18, 2002. Based on our preliminary review of UDAQ's proposed draft PM<sub>10</sub> maintenance plan submittal, the commitments below remain an issue. DIRECTOR'S DISCRETION: COMMENT # 143a. EPA informed UDAQ that the director's discretion provisions that allow for changes to be made to the SIP without EPA's approval and have resulted in SIP enforceability issues are counter to sections 110(a) and 110(i) of the Clean Air Act (CAA). We informed UDAQ that all directors' discretion provisions need to be removed from the SIP. UDAQ indicated that the State is interested in using authority under 40 CFR 70.6(a)(1)(iii) and EPA's White Paper No. 2 to modify SIP provisions through the Title V permitting process. EPA indicated that we will support the State's use of this authority. The proposed SIP package includes draft SIP language based on this authority, and with some changes (see prior comments), we believe the draft SIP language will address the principles of White Paper No. 2. In addition, we note that the State's proposal would remove a number of director's discretion provisions from the PM<sub>10</sub> SIP, and we endorse the State's efforts in this regard. However, we note that the proposed SIP revisions retain a number of director's discretion provisions and add new ones as well. We have made an effort to identify these individually in our comments on the proposed language. We are also concerned that problematic director's discretion provisions may remain in parts of the SIP that the State is not revising as part

of this effort. Failure to remove director's discretion provisions from the SIP could jeopardize our ability to approve the redesignation. {Comment made by the EPA; # I1} RESPONSE: UDAQ has removed language from R307-305-2 allowing sources to modify SIP requirements through permitting. Further the PM<sub>10</sub> SIP has been modified in Appendix H, where individual source specific requirements are delineated removing director's discretion. Concurrently, UDAQ has drafted enabling language in Appendix H of the proposed PM<sub>10</sub> SIP revisions that incorporates procedures to modify the SIP through a Title V, Operating Permit as permitted by 40 CFR 70.6(a)(1)(iii). VARIANCE PROCEDURES: COMMENT # 143b. The variance language that exists within the current SIP should be removed. As with director's discretion provisions, variance provisions approved into a SIP may make it appear that we have authorized the State to unilaterally change SIP requirements. This is inconsistent with the Clean Air Act, and the UDAQ variance procedures will not change this basic problem. {Comment made by the EPA; # I2} RESPONSE: Section 110(i) of the federal Clean Air Act was added to the federal law by the 1977 amendments to the Act. Section 110(i) provides that except for a number of listed exceptions, "no order, suspension, plan revision, or other action modifying any requirement of an applicable implementation plan may be taken with respect to any stationary source by the State or by the Administrator." Because of issues raised by EPA concerning the consistency between the Utah variance provisions and Section 110(i) of the federal Clean Air Act, the Utah rules were amended in November, 1979, to add a restriction on the granting of variances -- allowing the granting of variances as provided by law "unless prohibited by the Clean Air Act." That language has existed in the Utah rules since that date and is currently a part of Utah Administrative Code R307-102-4. The variance rule and its limitation were included in numerous State Implementation Plans and revisions submitted to EPA since 1979. EPA has approved the language as part of those implementation plans and revisions to those plans. A written opinion concerning the variance provisions by Fred Nelson, Assistant Attorney General, is attached to these comments. UDAQ clarified to the EPA the procedures for implementing the variance provisions, in a copy of the Variance Procedures Memo, dated February 21, 2003, and signed by Richard Sprott. This memo details the procedures that staff follows to assure that all variance requests are processed to determine their consistency with all applicable requirements, including the CAA. Therefore, there is no inconsistency between the CAA and Utah Rule R307-102-4. COMMENT # 143c. (EPA Comment # I3) Enforceable Emission Limits for Major Sources (including 24-hour emission limits): RESPONSE: UDAQ has included enforceable emission limits for all significant sources located in Salt Lake and Utah Counties (as well as some others in southern Davis County), and these limits are consistently expressed in terms of tons per day. These limits appear in Part IX.H of the proposed SIP, and would replace all that is currently in that Part. RESPONSE: See complete discussion at comment # 56, "Section IX. Part H - Emission Limits and Operating Practices:" (General Comments). COMMENT # 143d. (EPA Comment # I4) Emission Inventory and Modeling Analysis for Sources in Nonattainment areas: RESPONSE: See discussion at comment # 99, "PM<sub>10</sub> Emission Inventory" COMMENT # 143e. (EPA Comment # I5) Refinery SRU and Flaring: RESPONSE: See discussion at comment # 68, "Section IX. Part H - Emission Limits and Operating Practices:" (SRU Turnaround and Upset Flaring Emissions). NSR/BANKING/TRADING: COMMENT # 143f. UDAQ needs to address the emission banking and interpollutant trading issue. UDAQ has expressed concern regarding EPA's NSR Reform Rule and the impacts that the reform rule may have on what EPA has identified as deficiencies in Utah's NSR rules. EPA has expressed to UDAQ in the past that the State could still continue to work on the emission banking and interpollutant trading issues despite NSR Reform. UDAQ has also questioned whether EPA's concerns with UDAQ's NSR program would become moot once the areas are redesignated to attainment and fall under the State's PSD rules. We believe these issues will not become moot for the following reasons. First, areas of the State may remain nonattainment for other pollutants even if Salt Lake and Utah counties are redesignated attainment for PM<sub>10</sub>. Second, we think Utah must have an adequate

nonattainment NSR program in place in case any part of the State is designated nonattainment in the future. Finally, some of the issues we have identified apply to PSD and minor source permitting as well as nonattainment NSR. {Comment made by the EPA; # 16} **RESPONSE:** UDAQ agrees with EPA that there are issues in Utah's nonattainment NSR rule (R307-403) that need to be addressed. However, these issues do not affect the PM<sub>10</sub> maintenance plan and should be addressed separately. When EPA approves the maintenance plan and redesignates Utah County, Salt Lake County and Ogden City to attainment, R307-403 will no longer apply in the new maintenance areas. The PSD rule, R307-405 will become the permitting program for major sources and major modifications. Utah has either been redesignated to attainment or has submitted a maintenance plan to EPA for all nonattainment areas in the state. When those remaining plans are approved, R307-403 will not apply anywhere in the state, and so any issues in that rule will be academic. UDAQ also agrees with EPA that Utah needs to have an NSR program in place that will apply in any new nonattainment areas that are designated in the future. When looking at current monitoring data, it is clear that the two pollutants that are of most concern in Utah are PM<sub>2.5</sub> and ozone (8-hour standard). EPA has delayed finalizing the NSR reform provisions in the nonattainment permitting rules in 40 CFR 52.24 and 40 CFR Part 51, Appendix S to ensure that these rules are consistent with the implementation guidance for the PM<sub>2.5</sub> and 8-hour ozone standards. There are significant issues, such as precursors and increment, that must be addressed and it is unreasonable to expect Utah to resolve these issues at the state level prior to resolution of these issues at the national level. UDAQ anticipates that the federal nonattainment area permitting requirements will be finalized sometime this year. UDAQ plans to act expeditiously to revise Utah's nonattainment area permitting rules based on the new federal requirements. In the meantime, the current program is effective and will continue to function during the interim period. EPA mentions that there are some portions of their comments that apply to Utah's PSD program. UDAQ staff has reviewed EPA's earlier comments, and they seem to apply solely to the nonattainment area permitting program. Utah is in the process of developing a draft revision to R307-405 to incorporate the federal NSR reform provisions into Utah's rule. Utah intends to submit this rule to EPA by the end of the year, as required. If there are any issues with the revised rule, UDAQ welcomes comments from EPA during the public comment period for the revised PSD permitting rule. **COMMENT # 143g. (EPA Comment # 17) Unavoidable Breakdown Rule: RESPONSE:** UDAQ has re-proposed a draft of the Excess Emissions rule and submitted it to the EPA on March 3, 2005. UDAQ is committed to continue this rulemaking process. **COMMENT # 143h. (EPA Comment # 18) Backhalf Emissions Measuring: RESPONSE:** See discussion at comment # 58, "Section IX. Part H - Emission Limits and Operating Practices:" (Source Testing). **DIESEL PARTICULATE AND NO<sub>x</sub> EMISSIONS: COMMENT # 144.** Strategies to reduce diesel emissions would be appropriate due to the rail and truck yards near the North Salt Lake monitor that exceeds the PM<sub>2.5</sub> health standard. We recognize that Utah supports tightening federal standards for locomotive emissions, but there are local strategies that could be implemented. Last year, California Air Resources Board sponsored a risk assessment of diesel exhaust at a rail yard near Sacramento. The study concluded that dangerous concentrations of ultra-fine particulate extend widely outside the rural yard and affect residents for miles around. Specifically, it contributes an additional cancer risk at a rate between 100 and 500 cases per million people over an area in which 14,000 - 16,000 people live, and at a rate of 1 - 100 cases per million people over a larger area in which 140,000 - 155,000 people now live. The small size of the particles makes it an efficient means of delivering chemicals into our bodies. Diesel exhaust is easily inhaled deep into the lungs, where up to 85% of fine particles remains in the lungs 24 hours after initial exposure; this means that diesel exhaust has easy, long-lasting access to the most sensitive parts of the lungs. There are several strategies that could be used, in conjunction with ultra low sulfur fuel, to reduce diesel emissions. First, there are catalyzed diesel particulate filters (DPFs) and diesel oxidation catalysts (DOCs) that reduce PM dramatically. Currently, DPF retrofits for school buses and construction equipment

cost in the \$500 - 10,000 range; DOCs do not require ultra low sulfur fuel and are cheaper at \$700-2500 for school buses and construction equipment, but are less effective. Strategies to reduce idling should be considered; alternatives are auxiliary power generators, auxiliary power units, truck stop electrification, engine idle management technology, and no-idle hear and/or HVAC systems. Union Pacific is now using its first hybrid switching engine at Los Angeles area ports; it operates on an electric battery and a diesel engine that recharges the battery. Union Pacific estimates it will see 80-90% reductions in  $\text{NO}_x$ , and will use 40-60% less fuel. Reducing  $\text{NO}_x$  from locomotive emissions by replacing older engines with newer hybrids is also used in the Houston Galveston area as part of the Texas ozone reduction strategies. In Chicago, idle reduction strategies are in place, with reduction of 12.5 tons of  $\text{NO}_x$  at a cost of \$1420 per ton. {Comment made by Environmental Defense and Utah Chapter, Sierra Club} **RESPONSE:** Generally, an engine used in a switching yard is idling 70% of the time, and thus wastes significant amounts of fuel, as well as generating emissions of  $\text{NO}_x$  and other pollutants. There are two recent technologies that are promising for the future. The diesel-electric hybrid engine uses a 600-volt battery bank to power a 290-horsepower inline 6-cylinder diesel truck engine; it uses 40 - 60% less fuel and emits 80 - 90% fewer pollutants than conventional train engines. It is also cheaper to purchase, and cleaner, than the newest generation of diesel locomotives. Union Pacific has leased hybrid engines for use in California and Texas. The other technology is the diesel truck-engine switch locomotive (TES), which uses two state-of-the-art diesel engines developed for large, over the road trucks. EPA is expected to certify TES under its new Tier 2 standards. Utah DAQ encourages Union Pacific to evaluate the positive environmental and economic benefits and expand the use of this technology within Utah, especially in urban areas. DAQ staff has been consulting with personnel in school districts along the Wasatch Front to encourage use of cleaner school buses. **HEALTH AND HIGH  $\text{PM}_{2.5}$ :** **COMMENT # 145.** EPA's Clean Air Science Advisory Committee has deemed  $\text{PM}_{2.5}$  to be more dangerously unhealthy than was known when the standard was set in 1997, and EPA will issue a stronger standard soon. The pollutants that cause  $\text{PM}_{2.5}$  are the same as those causing  $\text{PM}_{10}$ . Yet we have before us a Plan that proposes that says we don't have to worry about  $\text{PM}_{10}$  any more and can begin discussing increments available to add more  $\text{PM}_{10}$  to an area with a rapidly growing population including many young children, pregnant women and people with heart and lung problems--those sensitive populations that are susceptible to health effects even below the federal health standard. What this Plan proposes in terms of increased  $\text{PM}_{10}$  pollution is really about how much more  $\text{PM}_{2.5}$  pollution we can add to the Wasatch Front. We should be addressing how we can reduce the  $\text{PM}_{2.5}$  levels that we have now. {Comment made by Sierra Club, Utah Chapter} **RESPONSE:** UDAQ began addressing  $\text{PM}_{2.5}$  pollution long before EPA issued a federal health standard for it and expects to continue to do so; some of the provisions that EPA adopted to regulate  $\text{PM}_{2.5}$  were based on the knowledge gained through data collected and analyzed in Utah and other states. Most of the strategies that Utah adopted to control  $\text{PM}_{10}$  also control  $\text{PM}_{2.5}$  because  $\text{PM}_{2.5}$  is a large portion of the overall  $\text{PM}_{10}$  measurements during wintertime temperature inversions. Within a year after EPA issued the  $\text{PM}_{2.5}$  standard, Utah began proceedings to regulate woodburning based on monitored and projected levels of  $\text{PM}_{2.5}$  (see response to #136 above). UDAQ will continue to work to find ways to reduce  $\text{PM}_{2.5}$  throughout the state, and is developing strategies by working with local communities. **COMMENT # 146.** We are very concerned about the reported exceedances at the North Salt Lake monitor. We should be trying to reduce  $\text{PM}_{2.5}$ . This monitor is near refineries, gravel operations, construction sites, and residential areas. {Comment made by Sierra Club, Utah Chapter} **RESPONSE:** UDAQ will take action to correct high  $\text{PM}_{2.5}$  values, as needed, in any area. It is possible that the excessive  $\text{PM}_{2.5}$  in 2004 at the North Salt Lake monitor had natural causes. One such possibility is blowing dust from the beaches of the Great Salt Lake; due to the 6-year drought, the beach area was both larger and drier in 2004 than it had been historically. UDAQ staff are acquiring and analyzing data needed to understand the precise nature of the problem; we will know more when we receive the results

of the filter analysis. COMMENT # 147.  $PM_{10}$  and  $PM_{2.5}$  are closely related and Utah should consider them together, especially since Salt Lake County is currently violating the annual  $PM_{2.5}$  standard [at the North Salt Lake monitor]. We understand that the data will not be certified until June 1, the average of  $15.2 \mu/m^3$  is a concern. This monitor is near several refineries, highway and railway corridors, rail and truck yards, gravel pits, and several residential areas. Because most of the particulate pollution in the Salt Lake area is due to industrial emissions and is in the smaller particle size range, the  $PM_{10}$  plan should set the framework for complying with the  $PM_{2.5}$  standard as well. Moreover, there is a large body of new health effects studies showing further evidence of the serious adverse health effects of  $PM_{2.5}$ , including respiratory and cardiovascular events that explain morbidity and mortality observed in epidemiological studies. Fine particles exacerbate preexisting illness in children with asthma, emergency room visits, and premature deaths. With this maintenance plan, Utah has the responsibility and the ability to begin to protect its citizens from fine particles and to fulfill the Clean Air Act's bedrock mandate to restore healthy air "as expeditiously as practicable." [Comment made by Environmental Defense and Utah Chapter, Sierra Club] RESPONSE: UDAQ understands the importance of maintaining all of the health-based standards, including the  $PM_{2.5}$  standard, throughout the state. COMMENT # 148. North Salt Lake is currently very close to a violation of the  $PM_{2.5}$  health standard, and a recent permitting action indicated that a sulfur dioxide dispersion analysis model predicted an exceedance of the 24-hour sulfur dioxide standard in terrain directly east of a refinery in North Salt Lake. Dispersion modeling does not account for large flaring events; thus, there could be episodic events with emissions far beyond that modeled. [Comment made by Wasatch Clean Air Coalition] RESPONSE: For discussion of the North Salt Lake monitor, see the response to comment #146 above. For a discussion of upset flaring events see the response to comment #68. COMMENT # 149. Monitoring refinery flares for emissions of  $PM_{2.5}$  precursors would be an important start in knowing more about what is in the flares in order to better control such emissions. Sulfur dioxide emissions have been detected as a problem in the refinery area. [Comment made by Sierra Club, Utah Chapter] RESPONSE: Again, this Plan appropriately addresses  $PM_{10}$ , not  $PM_{2.5}$ . However, as noted in the response to #145 above, UDAQ is already taking action to reduce  $PM_{2.5}$  emissions. As to any problems with sulfur dioxide in the area of the refineries, see the response to #148 above.



I P P # 3



**IV. Resolution of TPP#3 Permit Petition  
by IPSC.**

**Joint Stipulation**

BEFORE THE  
UTAH AIR QUALITY BOARD

In the Matter of

Unit 3, Intermountain Power Service,  
Millard County, Utah  
DAQE-AN0327010-04

**PARTIES' JOINT STIPULATION FOR  
DISPOSITION OF THIS CONTESTED  
CASE**

Petitioner, Intermountain Power Service Corporation, ("IPSC") initiated this contested case by filing with the Utah Air Quality Board ("Board") a Request for Agency Action on November 12, 2004 (as supplemented on November 15, 2004), contesting specific provisions of the Approval Order, DAQE-AN0327010-04. IPSC and the Utah Division of Air Quality ("UDAQ") have engaged in negotiations for disposition of this matter by stipulation. The Utah Administrative Code provides for settlement through an administrative order or through a proposed judicial consent decree, subject to the agreement of the settlers. Utah Admin. Code. §R307-103-14(6). The parties have now reached agreement for disposition of this contested Approval Order and to that end jointly stipulate as follows:

1. The parties request that the Board enter an Order approving and binding them to the terms of this Joint Stipulation for disposition of this matter.
2. The parties reserve their respective positions on the issues raised in IPSC's Request for Agency Action seeking review of the October 15, 2004 Approval Order and recognize that this Stipulation shall not be considered an admission by either party regarding the

issues raised in this matter, however, they agree that disposition of this contested case under the terms of this stipulation, upon approval by the Board, will serve the purposes of the Utah Air Conservation Act and make it unnecessary to adjudicate those particular issues in this matter. The parties also recognize that this settlement was negotiated for these specific circumstances and does not constitute an adjudication of the issues with precedential value for future cases.

3. Utah Code § 19-2-104 provides that the Board may "issue orders necessary to enforce the provisions of this chapter, enforce the orders by appropriate administrative and judicial proceedings and institute judicial proceedings to secure compliance with this chapter," as well as "settle or compromise any civil action initiated to compel compliance with this chapter and the rules made under this chapter." The parties agree to the stipulated changes of the Approval Order DAQE-AN0327010-04 (in the form attached as Appendix A hereto and incorporated herein), upon the Board's entry of an Order approving this Joint Stipulation.

4. The parties stipulate to the changes to the Approval Order contained in Appendix A to this Joint Stipulation, and agree that IPSC's Request for Agency Action shall be dismissed. Nothing in this agreement shall limit the Executive Secretary's or the Board's authority to enforce the Clean Air Act, the Utah Air Conservation Act, and applicable federal and state rules, including modification of any terms of the Approval Order. The Executive Secretary agrees to be bound by the startup/shutdown provisions of the Approval Order as set forth in Appendix A, unless modified by the Board. Any future changes to terms of the Approval Order may be subject to appeal by IPSC under applicable rules and the Utah Administrative Procedures Act.

5. Each party shall bear its own costs and attorney's fees incurred through the entry of an Order by the Board approving and incorporating this Joint Stipulation.

6. The signatories certify that they are authorized to bind their respective parties to this Joint Stipulation.

Dated this the \_\_\_\_\_ day of September, 2005.

FOR PETITIONER INTERMOUNTAIN  
POWER SERVICE CORPORATION:

FOR RESPONDENT, UTAH DIVISION OF  
AIR QUALITY

---

George W. Cross  
President & Chief Operations Officer &  
Responsible Official

---

Richard Sprott  
Executive Secretary,  
Air Quality Board  
Division of Air Quality

BEFORE THE  
UTAH AIR QUALITY BOARD

In the Matter of

Unit 3, Intermountain Power Service,  
Millard County, Utah  
DAQE-AN0327010-04

**ORDER REGARDING  
PARTIES' JOINT STIPULATION FOR  
DISPOSITION OF THIS CONTESTED  
CASE**

The Utah Air Quality Board hereby approves the Joint Stipulation for Disposition of this Contested Case in the above-captioned case and orders that its terms be implemented by IPSC and UDAQ.

DATED this \_\_\_\_ day of September, 2005.

UTAH AIR QUALITY BOARD

By: \_\_\_\_\_

## Appendix A

# **IV. Resolution of IPP#3 Permit Petition by IPSC**

**AG Final**

*Appendix A*



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

OLENE S. WALKER  
*Governor*

GAYLE F. McKEACHNIE  
*Lieutenant Governor*

DAQE-AN0327010-04

October 15, 2004

George W. Cross  
Intermountain Power Service Corporation  
850 West Brush Wellman Road  
Delta, Utah 84624-9522

Dear Mr. Cross:

Re: Approval Order: PSD Major Modification to Add New Unit 3 at Intermountain Power  
Generating Station, Millard County, Utah CDS-A, ATT, NSPS, HAPs, MACT, Title IV, Title V  
Major. Project Code: N0327-010

The attached document is the Approval Order (AO) for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Ms. Milka M. Radulovic. She may be reached at (801) 536-4232.

Sincerely,

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

RWS: MR:jc

cc: Central Utah Public Health Department  
Mike Owens, EPA Region VIII



**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER: PSD MAJOR MODIFICATION TO ADD  
NEW UNIT 3 AT INTERMOUNTAIN POWER GENERATING  
STATION**

**Prepared By: Milka M. Radulovic, Engineer  
(801) 536-4232  
Email: [milkar@utah.gov](mailto:milkar@utah.gov)**

**APPROVAL ORDER NUMBER**

**DAQE-AN0327010-04**

**Date: October 15, 2004**

**Intermountain Power Service Corporation**

**Source Contact  
George Cross  
(435) 864-4414**

**Richard W. Sprott  
Executive Secretary  
Utah Air Quality Board**

### *Abstract*

*Intermountain Power Service Corporation (IPSC) currently operates the Intermountain Power Plant (IPP) located near the town of Delta, Utah. The existing plant has two drum-type, pulverized coal (PC)-fired boilers that provide steam to two power-generating units, designated as Unit 1 and Unit 2, each with nominal gross capacity of 950 MW. The Intermountain Power Service Corporation (IPSC) submitted a Notice of Intent to expand the IPP facility by adding one additional base load pulverized coal fired electricity generating Unit 3, designed at nominal 950-gross MW (900-net MW) with a dry bottom, tangentially fired or wall-fired boiler and associated equipment. The Unit 3 boiler will be equipped with wet flue gas desulphurization (WFGD), selective catalytic reduction (SCR), and baghouses for control of the various emissions.*

*This project is a major modification for the Prevention of Significant Deterioration (PSD) regulations. On site meteorological monitoring, air dispersion modeling, air quality impacts analysis including visibility and PSD class I and II impacts analysis, non-attainment boundary impact analysis, and a complete top-down Best Available Control Technology (BACT) review were completed and submitted by the IPSC as a part of their Notice of Intent (NOI). Also, an application for case-by-case maximum achievable control technology (MACT) determination for hazardous air pollutants (HAPs) was provided as a part of the NOI. Unit 3 is also subject to New Source Performance Standards under 40 Code of Federal Regulations (CFR) 60, Subparts A, Da and Y. Title IV and Title V of the 1990 Clean Air Act apply to this modification and the Title V permit shall be amended prior to the operation of the Unit 3. Unit 3 boiler will be classified Group I, Phase II under the Acid Rain Program. The increment analysis indicated that the amount of  $PM_{10}$  24-hour increment consumed by the proposed project would be less than 50% of the standard; therefore, approval under Utah Administrative Code R307-401-6 (3) from the Utah Air Quality Board was not required. The IPP will meet all primary and secondary National Ambient Air Quality Standards (NAAQS). The IPP will also meet Class I increments in the National Parks in southern Utah and Class II PSD increments in the vicinity of the plant. IPP Unit 3 will have no adverse effect on air quality related values (including visibility) on any Class I areas.*

*The IPP is located in Millard County, an attainment area for all criteria pollutants.*

*Estimated potential to emit totals from Unit 3, in tons per year, are as follows:  $PM_{10}$  (filterable) = 496.5,  $NO_x$  = 2,775,  $SO_2$  = 3,567.5,  $CO$  = 5,946,  $VOC$  = 107,  $HAPs$  = 199*

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period was held in accordance with UAC R307-401-4 and comments were received. The comments were evaluated and the Approval Order was modified to incorporate those comments. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

#### General Conditions:

1. This Approval Order (AO) applies to the following company:

Site Location

Intermountain Power Service  
Corporation  
850 West Brush Wellman Road  
Delta, UT 84624-9522

Corporate Office Location

Intermountain Power Service  
Corporation  
850 W. Brush Wellman Road  
Delta, UT 84624

Phone Number: (435) 864-4414

Fax Number: (435) 864-6670

The equipment listed in this AO shall be operated at the following location:

850 West Brush Wellman Road, Delta, Millard County, Utah

Universal Transverse Mercator (UTM) Coordinate System: datum NAD27  
4,374.4 kilometers Northing, 364.2 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.
5. All records referenced in this AO or in applicable NSPS and/or NESHAP and/or MACT standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the five-year period prior to the date of the request. Records shall be kept for the following minimum periods:
  - A. Used oil consumption Five years
  - B. Emission inventories Five years from the due date of each statement or until the next inventory is due, whichever is longer.
  - C. All other records Five years
6. Intermountain Power Service Corporation (IPSC) shall install and operate the nominal 950 gross-MW power generating Unit 3 with dry-bottom pulverized coal fired boiler and modified equipment associated with Unit 3, as defined by this AO, in accordance with the terms and conditions of this AO, which was written pursuant to IPSC's Notice of Intent submitted to the Division of Air Quality (DAQ) on December 16, 2002 and significant additional information provided throughout the process.
7. The approved installations shall consist of the following equipment or equivalent\*:

- A. Unit 3 Dry-bottom Pulverized Coal Fired Boiler for base load operation with Overfire Air Ports System
  - Maximum Heat Input Rate:  $9050 \times 10^6$  Btu/hr
  - Type of Burner: Ultra Low  $\text{NO}_x$  Burners or equivalent
- B. Unit 3 Main Boiler Stack
  - Stack Height: At least 712 feet, as measured from ground level at the base of the stack.
- C. Unit 3 Main Boiler Control Equipment:
  - C.1 Boiler Stack Fabric Filter Baghouse
  - C.2 Wet Limestone Flue Gas Desulfurization System (WFGD) built in redundancy
  - C.3 Selective Catalytic Reduction System with ammonia injection
- D. Two Unit 3 Cooling Towers, 3A and 3B, equipped with mechanical Mist Eliminators rated at 0.0005 percent circulating water drift loss.
- E. Unit 3 Coal Handling:
  - E.1 Modification of existing conveyors: higher capacity motors on Belts 7 and 8, Belts 9A/9B, 15A/15B expanded to 48" wide;
  - E.2 New Unit 3 36" wide Conveyors-16A/16B, 17A/17B, en mass chain totally enclosed conveyors 301A/B, 302A/B, 303, 304, 305, and 306.
  - E.3 New Coal Transfer Building #5 with Dust Collector EP-127.
  - E.4 New Coal East Storage Silos 301, 302, 303, 304, and Coal East Storage Silo Bay Dust Collector EP-128.
  - E.5 New Coal West Storage Silos 305, 306, 307, 308 and Coal West Storage Silo Bay Dust Collector EP-129.
- F. Unit 3 Fly Ash Handling Equipment: To convey Fly Ash from the fabric filter to the storage silo:
  - F.1 Fly Ash Storage Silo 1C with Sealed Loading Spout Vent Dust Collector EP-171
  - F.2 Fly Ash Storage Silo 1C with Vent Dust Collector EP-172
- G. Unit 3 Bottom Ash Handling System to convey bottom ash from boiler to storage area.
- H. Unit 3 Limestone Handling System for WFGD system

- I. Unit 3 WFGD Sludge Handling System
- J. Existing Auxiliary Boiler Modification:  
Installation of an extension on each boiler stack so that each stack height is at least 72 feet, as measured from the ground level at the base of the stack.
- K. Unit 3 Water Treatment Plant, Steam System, Turbine generator, and Air heaters\*\*

\* Equivalency shall be determined by the Executive Secretary.

\*\* This equipment is listed for informational purposes only. There are no emissions from this equipment.

8. Intermountain Power Service Corporation shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #7 has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11.

## Limitations and Tests Procedures

9. Emissions to the atmosphere from the indicated emission point(s) shall not exceed the following rates and concentrations:

| Source: Unit 3 Main Boiler Stack, BACT/MACT |                                |                          |
|---|--------------------------------|--------------------------|
| Pollutant                                   | Emission Rate (lb/MMBtu)       | Averaging Period         |
| SO <sub>2</sub>                             | 0.10                           | 24-hour block average    |
| SO <sub>2</sub>                             | 0.09                           | 30-day rolling average   |
| NO <sub>x</sub>                             | 0.07                           | 30-day rolling average   |
| PM <sub>10</sub> (filterable)               | 0.012                          | 3-test run average       |
| PM (filterable)                             | 0.013                          | 3-test run average       |
| CO  | 0.15                           | 30-day rolling average   |
| VOC   | 0.0027                         | 3- test run average      |
| H <sub>2</sub> SO <sub>4</sub>              | 0.0044                         | 24-hour block average    |
| Fluorides/HF                                | 0.0005                         | 3- test run average      |
| Lead  | 0.00002                        | 3- test run average      |
| Hg- bituminous coal*                        | 6 x 10 <sup>-6</sup> lb/ MWhr  | 12-month rolling average |
| Hg- subbituminous coal*                     | 20 x 10 <sup>-6</sup> lb/ MWhr | 12-month rolling average |

| Source: Unit 3 Main Boiler Stack, Air Quality Modeling |                       |                         |
|--|-----------------------|-------------------------|
| Pollutant  | Emission Rate (lb/hr) | Averaging Period        |
| SO <sub>2</sub>  | 1,357.5               | 3-hour block average    |
| NO <sub>x</sub>  | 633.5***              | 24-hour block average   |
| PM <sub>10</sub><br>(filterable+condensable)           | 221***                | 24-hour block average** |
| CO   | 3,000                 | 8-hour block average    |
| HCL  | 38.13 lb/hr           | 3-test run average      |

\*If a blend of bituminous and subbituminous coals is used, the Hg emission limitation for the blend will be determined by 40 CFR 63.9990(a)(5) (Proposed Rules, Federal Register, Vol. 69, No. 20, January 30, 2004, pages 4720-4721).

\*\*Based on a 24-hour test run or any method approved by the Executive Secretary, which will provide 24-hour data.

\*\*\* During periods of startup and shutdown Condition 13 and Condition 24 shall apply.

24-hour block means the period of time between 12:01a.m. and 12:00 midnight.

8-hour block average means eight consecutive hours.

10. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

| A. | <u>Emissions Point</u>   | <u>Pollutant</u>                            | <u>Testing Status</u> | <u>Test Frequency</u> |
|----|--------------------------|---|-----------------------|-----------------------|
|    | Unit 3 Main Boiler Stack | PM <sub>10</sub> (f)/PM <sub>10</sub> (f+c) | Initial               | Annual                |
|    |                          | PM (f)                                      | Initial               | Annual**              |
|    |                          | SO <sub>2</sub>                             | Initial               | CEM                   |
|    |                          | NO <sub>x</sub>                             | Initial               | CEM                   |
|    |                          | CO  | Initial               | CEM*                  |
|    |                          | H <sub>2</sub> SO <sub>4</sub>              | Initial               | Annual                |
|    |                          | VOC   | Initial               | Annual                |
|    |                          | Fluorides/HF                                | Initial               | 60-months             |
|    |                          | Lead  | Initial               | 60-months             |
|    |                          | HCl   | Initial               | 60-months             |
|    |                          | Hg  | Initial               | Hg CEM***             |

f-filterable; c-condensable

\*or may use CEM equivalent, such as parametric monitoring that may be approved by the Executive Secretary

\*\*or parametric monitoring that may be approved by the Executive Secretary

\*\*\* 40 CFR 60, Appendix B, Performance Specification 12a (CEM) (Proposed Rules, Federal Register, Vol. 69, No. 20, January 30, 2004, page 4744) or 40 CFR 63, Appendix B, Method 324 (Sorbent Trap Sampling) (Proposed Rules, Federal Register, Vol. 69, No. 20, January 30, 2004, page 4736) or other testing methods that may be approved.

B. Testing Status (To be applied to the source listed above)

Initial: Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source.

Annual: Test at least every year. The Executive Secretary may require testing at any time.

60-months: Test at least every five years. The Executive Secretary may require testing at any time.

CEM: After the initial compliance test, compliance shall be demonstrated through use of a Continuous Emissions Monitoring System (CEMs) as outlined in Condition below. The Executive Secretary may require testing at any time.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other approved methods.

F. PM/PM<sub>10</sub>

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201, 201A, or other approved methods. The back half condensibles shall also be tested using the method 202 or other approved methods. All particulate captured shall be considered PM<sub>10</sub>.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists (or for PM determination), then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5A, 5B, or 5D, or as appropriate, or other approved methods. The back half condensibles shall also be tested using the Method 202 or other approved methods. The portion of the front half of the catch considered PM<sub>10</sub> shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Executive Secretary.

The back half condensibles shall not be used for compliance demonstration for PM (filterable) limit but shall be used for inventory purposes.

For determination of compliance with PM<sub>10</sub> limit, both the front and backhalf catches shall be used.

G. Sulfur Dioxide (SO<sub>2</sub>)

40 CFR 60, Appendix A, Method 6, 6A, 6B, 6C or other approved methods

H. Nitrogen Oxides (NO<sub>x</sub>)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E or other approved methods

I. Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>)

40 CFR 60, Appendix A, Method 8, 8A or other approved methods

J. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other approved methods.

K. Volatile Organic Compounds (VOCs)

40 CFR 60, Appendix A, Method 25 or 25A or other approved methods.

L. Hydrogen chloride (HCl)

40 CFR 60, Appendix A, Method 26 or 26A or other approved methods.

M. Fluorides/Hydrogen fluoride (HF-hydrofluoric acid)

40 CFR 60, Appendix A, Method 26 or 26A or other approved methods.

N. Lead

40 CFR 60, Appendix A, Method 12 or other approved methods.

O. Mercury

ASTM Method D6784-02 or 40 CFR 60, Appendix A, Method 29 or other approved methods.

P. Calculations for Testing Results

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.



Q. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

1. Testing shall be at no less than 90% of the production rate achieved to date.
2. If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
3. The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

R. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years

11. Differential pressure range at the indicated points shall be within the following values

## Unit 3 Dust Collectors

| <u>Source</u>  | <u>Differential pressure range across the<br/>dust collector</u><br>(Inches of water gage) |
|--|--|
| Fly Ash Storage Silo 1C Loading Spout Vent (EP-171)..... | 0.5 to 12*   |
| Fly Ash Storage Silo 1D Vent (EP-172) .....              | 0.5 to 12*   |
| Coal Transfers Building #5 Vent (EP-127).....            | 0.5 to 12*   |
| Coal East Storage Silo Bay (EP-128).....                 | 0.5 to 12*   |
| Coal West Storage Silo Bay (EP-129) .....                | 0.5 to 12*   |

\*If differential pressure is less than 2 inches or greater than 10 inches, work orders will be written to investigate. Dust collector may run in the 0.5 to 2 or 10 to 12 range if reason is known. Recording of the reading is required on a monthly basis. The instrument shall be calibrated against a primary standard annually. Preventive maintenance shall be done quarterly on each baghouse.

12. Visible emissions from the emission points covered under this AO shall not exceed the following values:

- A. All baghouses (including the Unit 3 main boiler stack) - 10% opacity. During periods of startup and shutdown Condition 13 and Condition 24 shall apply.
- B. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions from intermittent sources shall use proposed Method 203 A, B, and C, as applicable. For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

- 13. IPSC shall develop, implement, and maintain a written startup and shutdown work practice plan (Plan) that describes, in detail, procedures for operating and maintaining the Unit 3 main boiler, including associated air pollution control and monitoring equipment, during periods of startup and shutdown. The Plan shall be submitted to the Executive Secretary at least 180 days prior to the initial startup of the Unit 3 main boiler.
  - A. For NO<sub>x</sub>, startup begins with introduction of fuel into the boiler at ambient indoor temperature and ends when the flue gas exiting the SCR is above 600 degrees F. Shutdown begins when the SCR is below 600 degrees F and ends when the fuel is turned off.
  - B. For PM<sub>10</sub>, startup begins with introduction of fuel into the boiler at ambient indoor temperature and ends when the outlet temperature of the main boiler baghouse is above 210 degrees F and less than 10 percent of the boiler heat input is furnished by fuel oil. Shutdown begins when the baghouse is below 210 degrees F and more than 10 percent of the boiler heat input is furnished by fuel oil and ends when the fuel is turned off.
  - C. For opacity, startup and shutdown are defined the same as for PM<sub>10</sub>.
  - D. Plan shall contain steps to minimize, to the maximum extent practicable, the frequency and duration of operation in startup or shutdown mode. This shall include, but not necessarily be limited to, careful and prudent design, planning, operation, and maintenance so as to avoid unnecessary, preventable, or unreasonably frequent or lengthy startups and shutdowns. Bypass of associated air pollution control equipment shall only be used to prevent loss of life, personal injury, or severe property damage.
  - E. IPSC shall keep records which demonstrate that IPSC complied with the general duty to minimize emissions during periods of startup and shutdown, as set forth in Condition 24. These records shall include the time and date of occurrence and duration of each startup and shutdown as well as any other pertinent information.
  - F. IPSC may periodically revise the startup and shutdown plan for the affected source as necessary to satisfy the requirements of this Condition or to reflect changes in equipment or procedures at the affected source. Each such revision to the startup and shutdown plan must be submitted to the Executive Secretary
- 14. The following Unit 3 boiler heat rate and consumption limits shall not be exceeded:
  - A. 9050 million British Thermal Units (MMBtu) per hour full load heat input rate for Unit 3 boiler, using Higher Heating Value HHV of the fuel.
  - B. 3,541,248 tons of coal burned per rolling 12-month period

Records of consumption/heat rate input shall be kept for all periods when the plant is in operation. The records of consumption/production shall be kept on a daily basis.

15. Unit 1 & 2 emergency generator located at (source ID102) shall be tested for maintenance only during the periods between 6:00AM and 6:00 PM. Records of the time, date, and duration of emergency generator testing shall be determined by supervisor monitoring and maintaining of an operations log.

#### Roads and Fugitive Dust

16. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.
17. IPSC shall abide by a fugitive dust control plan acceptable to the Executive Secretary for the control of all dust sources associated with the addition of Unit 3 at the Intermountain Power Generation site. IPSC shall submit a fugitive dust control plan to the Executive Secretary, Attention: Compliance Section, for approval within 90 days of the date of this AO. This plan shall contain sufficient controls to prevent an increase in PM<sub>10</sub> emissions above those modeled for this AO. In addition, as a minimum the following control measures shall be included in the plan:
  - a. Vacuum street sweeping for paved haul roads;
  - b. Chemical stabilization for unpaved haul roads;
  - c. Water sprays for conditioned sludge handling;
  - d. Wet suppression with chemicals for long term reserve and emergency coal storage piles;
  - e. Surfactants and compaction for active coal storage piles and their maintenance;
  - f. Telescopic chute, enclosures and surfactants for coal handling.

Any changes of the conditions established in the fugitive dust control plan must be approved by the Executive Secretary.

18. Visible fugitive dust emissions from Unit 3 haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made  $\frac{1}{2}$  vehicle length or greater behind the vehicle and at approximately  $\frac{1}{2}$  the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

#### Fuels

19. The owner/operator shall use either bituminous or blend of bituminous and up to thirty percent subbituminous coals as a primary fuel, blended to meet emission performance standards. The owner/operator shall use fuel oil during the startups, shutdowns, maintenance, upset conditions and flame stabilization in the Unit 3 9050 x 10<sup>6</sup> Btu/hr boiler. The owner/operator may blend self-generated used oil with coal at the active coal pile reclaim structure providing record that self-generated used oil has not been mixed with hazardous waste.

20. The sulfur content of any fuel oil burned shall not exceed:

0.85 lb per 10<sup>6</sup> Btu heat input for fuel used in the Unit 3 9050 x 10<sup>6</sup> Btu/hr boiler

The sulfur content shall comply with all applicable sections of R307-203. Methods for determining sulfur content of coal shall be those methods of the American Society for Testing and Materials

- A. For determining sulfur content in coal, ASTM Methods D3177-75 or D4239-85 are to be used.
- B. For determining the gross calorific (or Btu) content of coal, ASTM Methods D2015-77 or D3286-85 are to be used.
- C. The sulfur content of fuel oil shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of fuel oil shall either be by SPC's own testing or test reports from the fuel oil marketer.

#### **Federal Limitations and Requirements**

- 21. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18, Subpart Da, 40 CFR 60.40a to 60.49a (Standards of Performance for Electric Utility Steam Generating Units for Which Construction in Commenced After September 18, 1978), Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants), and 40 CFR 64 (Compliance Assurance Monitoring for Major Stationary Sources) apply to this installation.
- 22. In addition to the requirements of this AO, all applicable provisions of 40 CFR Part 72, 73, 75, 76, 77, and 78 - Federal regulations for the Acid Rain Program under Clean Air Act Title IV apply to this installation.

#### **Monitoring - General Process**

- 23. The owner/operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMs) on the main boilers stacks and SO<sub>2</sub> removal scrubbers inlets. The owner/operator shall record the output of the system, for measuring the opacity, SO<sub>2</sub>, CO, and NO<sub>x</sub> emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC; and 40 CFR 60, Appendix B.

All continuous emissions monitoring devices as required in federal regulations and state rules shall be installed and operational prior to placing the affected source in operation.

Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the owner/operator of an affected source shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

#### **Records & Miscellaneous**

24. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, inspection of the source, and records required in Condition 13. All maintenance performed on equipment authorized by this AO shall be recorded.
25. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
26. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

Under R307-150-1, the Executive Secretary may require a source to submit an emission inventory for any full or partial year on reasonable notice.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: <http://www.airquality.utah.gov/>

The annual emissions estimations below are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential to Emit (PTE) emissions for the entire Unit 3 operations are currently calculated at the following values:

|    | <u>Pollutant</u>                     | <u>Tons/yr</u> |
|----|--------------------------------------|----------------|
| A. | PM <sub>10</sub> (filterable).....   | 496.5          |
| B. | SO <sub>2</sub> .....                | 3,567.5        |
| C. | NO <sub>x</sub> .....                | 2775           |
| D. | CO .....                             | 5946           |
| E. | VOC .....                            | 107            |
| F. | H <sub>2</sub> SO <sub>4</sub> ..... | 174            |
| G. | Lead.....                            | 0.79           |
| H. | Total Reduced Sulfur .....           | 29             |
| I. | Reduced Sulfur Compounds .....       | 29             |

|    |                              |        |
|----|------------------------------|--------|
| J. | HAPs                         |        |
|    | Mercury.....                 | 0.0413 |
|    | Hydrochloric Acid (HCL)..... | 167.01 |
|    | Fluorides/HF .....           | 20     |
|    | Total HAPs .....             | 199    |

Approved By:

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

# **IV. Resolution of ITP#3 Permit Petition by IPSC**

## **AG Showing Changes**



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

OLENE S. WALKER  
*Governor*

GAYLE F. McKEACHNIE  
*Lieutenant Governor*

DAQE-AN0327010-04

October 15, 2004

George W. Cross  
Intermountain Power Service Corporation  
850 West Brush Wellman Road  
Delta, Utah 84624-9522

Dear Mr. Cross:

Re: Approval Order: PSD Major Modification to Add New Unit 3 at Intermountain Power  
Generating Station, Millard County, Utah CDS-A, ATT, NSPS, HAPs, MACT, Title IV, Title V  
Major. Project Code: N0327-010

The attached document is the Approval Order (AO) for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Ms. Milka M. Radulovic. She may be reached at (801) 536-4232.

Sincerely,

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

RWS: MR:jc

cc: Central Utah Public Health Department  
Mike Owens, EPA Region VIII



**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER: PSD MAJOR MODIFICATION TO ADD  
NEW UNIT 3 AT INTERMOUNTAIN POWER GENERATING  
STATION**

**Prepared By: Milka M. Radulovic, Engineer  
(801) 536-4232  
Email: [milkar@utah.gov](mailto:milkar@utah.gov)**

**APPROVAL ORDER NUMBER**

**DAQE-AN0327010-04**

**Date: October 15, 2004**

**Intermountain Power Service Corporation**

**Source Contact  
George Cross  
(435) 864-4414**

**Richard W. Sprott  
Executive Secretary  
Utah Air Quality Board**

## Abstract

Intermountain Power Service Corporation (IPSC) currently operates the Intermountain Power Plant (IPP) located near the town of Delta, Utah. The existing plant has two drum-type, pulverized coal (PC)-fired boilers that provide steam to two power-generating units, designated as Unit 1 and Unit 2, each with nominal gross capacity of 950 MW. The Intermountain Power Service Corporation (IPSC) submitted a Notice of Intent to expand the IPP facility by adding one additional base load pulverized coal fired electricity generating Unit 3, designed at nominal 950-gross MW (900-net MW) with a dry bottom, tangentially fired or wall-fired boiler and associated equipment. The Unit 3 boiler will be equipped with wet flue gas desulphurization (WFGD), selective catalytic reduction (SCR), and baghouses for control of the various emissions.

This project is a major modification for the Prevention of Significant Deterioration (PSD) regulations. On site meteorological monitoring, air dispersion modeling, air quality impacts analysis including visibility and PSD class I and II impacts analysis, non-attainment boundary impact analysis, and a complete top-down Best Available Control Technology (BACT) review were completed and submitted by the IPSC as a part of their Notice of Intent (NOI). Also, an application for case-by-case maximum achievable control technology (MACT) determination for hazardous air pollutants (HAPs) was provided as a part of the NOI. Unit 3 is also subject to New Source Performance Standards under 40 Code of Federal Regulations (CFR) 60, Subparts A, Da and Y. Title IV and Title V of the 1990 Clean Air Act apply to this modification and the Title V permit shall be amended prior to the operation of the Unit 3. Unit 3 boiler will be classified Group 1, Phase II under the Acid Rain Program. The increment analysis indicated that the amount of  $PM_{10}$  24-hour increment consumed by the proposed project would be less than 50% of the standard; therefore, approval under Utah Administrative Code R307-401-6 (3) from the Utah Air Quality Board was not required. The IPP will meet all primary and secondary National Ambient Air Quality Standards (NAAQS). The IPP will also meet Class I increments in the National Parks in southern Utah and Class II PSD increments in the vicinity of the plant. IPP Unit 3 will have no adverse effect on air quality related values (including visibility) on any Class I areas.

The IPP is located in Millard County, an attainment area for all criteria pollutants.

Estimated potential to emit totals from Unit 3, in tons per year, are as follows:  $PM_{10}$  (filterable) = 496.5,  $NO_x$  = 2,775,  $SO_2$  = 3,567.5, CO = 5,946, VOC = 107, HAPs = 199

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period was held in accordance with UAC R307-401-4 and comments were received. The comments were evaluated and the Approval Order was modified to incorporate those comments. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

### General Conditions:

1. This Approval Order (AO) applies to the following company:

Site Location

Intermountain Power Service  
Corporation  
850 West Brush Wellman Road  
Delta, UT 84624-9522

Corporate Office Location

Intermountain Power Service  
Corporation  
850 W. Brush Wellman Road  
Delta, UT 84624

Phone Number: (435) 864-4414  
Fax Number: (435) 864-6670

The equipment listed in this AO shall be operated at the following location:

850 West Brush Wellman Road, Delta, Millard County, Utah

Universal Transverse Mercator (UTM) Coordinate System: datum NAD27  
4,374.4 kilometers Northing, 364.2 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401-1.
5. All records referenced in this AO or in applicable NSPS and/or NESHAP and/or MACT standards, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the five-year period prior to the date of the request. Records shall be kept for the following minimum periods:
  - A. Used oil consumption Five years
  - B. Emission inventories Five years from the due date of each statement or until the next inventory is due, whichever is longer.
  - C. All other records Five years
6. Intermountain Power Service Corporation (IPSC) shall install and operate the nominal 950 gross-MW power generating Unit 3 with dry-bottom pulverized coal fired boiler and modified equipment associated with Unit 3, as defined by this AO, in accordance with the terms and conditions of this AO, which was written pursuant to IPSC's Notice of Intent submitted to the Division of Air Quality (DAQ) on December 16, 2002 and significant additional information provided throughout the process.
7. The approved installations shall consist of the following equipment or equivalent\*:

- A. Unit 3 Dry-bottom Pulverized Coal Fired Boiler for base load operation with Overfire Air Ports System
  - Maximum Heat Input Rate: 9050 x 10<sup>6</sup> Btu/hr
  - Type of Burner: Ultra Low NO<sub>x</sub> Burners or equivalent
- B. Unit 3 Main Boiler Stack
  - Stack Height: At least 712 feet, as measured from ground level at the base of the stack.
- C. Unit 3 Main Boiler Control Equipment:
  - C.1 Boiler Stack Fabric Filter Baghouse
  - C.2 Wet Limestone Flue Gas Desulfurization System (WFGD) built in redundancy
  - C.3 Selective Catalytic Reduction System with ammonia injection
- D. Two Unit 3 Cooling Towers, 3A and 3B, equipped with mechanical Mist Eliminators rated at 0.0005 percent circulating water drift loss.
- E. Unit 3 Coal Handling:
  - E.1 Modification of existing conveyors: higher capacity motors on Belts 7 and 8, Belts 9A/9B, 15A/15B expanded to 48" wide;
  - E.2 New Unit 3 36" wide Conveyors-16A/16B, 17A/17B, en mass chain totally enclosed conveyors 301A/B, 302A/B, 303, 304, 305, and 306.
  - E.3 New Coal Transfer Building #5 with Dust Collector EP-127.
  - E.4 New Coal East Storage Silos 301, 302, 303, 304, and Coal East Storage Silo Bay Dust Collector EP-128.
  - E.5 New Coal West Storage Silos 305, 306, 307, 308 and Coal West Storage Silo Bay Dust Collector EP-129.
- F. Unit 3 Fly Ash Handling Equipment: To convey Fly Ash from the fabric filter to the storage silo:
  - F.1 Fly Ash Storage Silo 1C with Sealed Loading Spout Vent Dust Collector EP-171
  - F.2 Fly Ash Storage Silo 1C with Vent Dust Collector EP-172
- G. Unit 3 Bottom Ash Handling System to convey bottom ash from boiler to storage area.
- H. Unit 3 Limestone Handling System for WFGD system

- I. Unit 3 WFGD Sludge Handling System
- J. Existing Auxiliary Boiler Modification:  
Installation of an extension on each boiler stack so that each stack height is at least 72 feet, as measured from the ground level at the base of the stack.
- K. Unit 3 Water Treatment Plant, Steam System, Turbine generator, and Air heaters\*\*

\* Equivalency shall be determined by the Executive Secretary.

\*\* This equipment is listed for informational purposes only. There are no emissions from this equipment.

8. Intermountain Power Service Corporation shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #7 has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11.

## Limitations and Tests Procedures

9. Emissions to the atmosphere from the indicated emission point(s) shall not exceed the following rates and concentrations:

| Source: Unit 3 Main Boiler Stack, BACT/MACT |                                |                          |
|---|--------------------------------|--------------------------|
| Pollutant                                   | Emission Rate (lb/MMBtu)       | Averaging Period         |
| SO <sub>2</sub>                             | 0.10                           | 24-hour block average    |
| SO <sub>2</sub>                             | 0.09                           | 30-day rolling average   |
| NO <sub>x</sub>                             | 0.07                           | 30-day rolling average   |
| PM <sub>10</sub> (filterable)               | 0.012                          | 3-test run average       |
| PM (filterable)                             | 0.013                          | 3-test run average       |
| CO  | 0.15                           | 30-day rolling average   |
| VOC   | 0.0027                         | 3- test run average      |
| H <sub>2</sub> SO <sub>4</sub>              | 0.0044                         | 24-hour block average    |
| Fluorides/HF                                | 0.0005                         | 3- test run average      |
| Lead  | 0.00002                        | 3- test run average      |
| Hg- bituminous coal*                        | 6 x 10 <sup>-6</sup> lb/ MWhr  | 12-month rolling average |
| Hg- subbituminous coal*                     | 20 x 10 <sup>-6</sup> lb/ MWhr | 12-month rolling average |

| Source: Unit 3 Main Boiler Stack, Air Quality Modeling |                       |                         |
|--|-----------------------|-------------------------|
| Pollutant  | Emission Rate (lb/hr) | Averaging Period        |
| SO <sub>2</sub>  | 1,357.5               | 3-hour block average    |
| NO <sub>x</sub>  | 633.5***              | 24-hour block average   |
| PM <sub>10</sub><br>(filterable+condensable)           | 221***                | 24-hour block average** |
| CO   | 3,000                 | 8-hour block average    |
| HCL  | 38.13 lb/hr           | 3-test run average      |

\*If a blend of bituminous and subbituminous coals is used, the Hg emission limitation for the blend will be determined by 40 CFR 63.9990(a)(5) (Proposed Rules, Federal Register, Vol. 69, No. 20, January 30, 2004, pages 4720-4721).

\*\*Based on a 24-hour test run or any method approved by the Executive Secretary, which will provide 24-hour data.

\*\*\**During periods of startup and shutdown Condition 13 and Condition 24 shall apply.*

24-hour block means the period of time between 12:01a.m. and 12:00 midnight.

8-hour block average means eight consecutive hours.

10. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

|    |                        |                  |                       |                       |
|----|------------------------|------------------|-----------------------|-----------------------|
| A. | <u>Emissions Point</u> | <u>Pollutant</u> | <u>Testing Status</u> | <u>Test Frequency</u> |
|----|------------------------|------------------|-----------------------|-----------------------|

|                          |   |         |           |
|--------------------------|---|---------|-----------|
| Unit 3 Main Boiler Stack | PM <sub>10</sub> (f)/PM <sub>10</sub> (f+c) | Initial | Annual    |
|                          | PM (f)                                      | Initial | Annual**  |
|                          | SO <sub>2</sub>                             | Initial | CEM       |
|                          | NO <sub>x</sub>                             | Initial | CEM       |
|                          | CO  | Initial | CEM*      |
|                          | H <sub>2</sub> SO <sub>4</sub>              | Initial | Annual    |
|                          | VOC   | Initial | Annual    |
|                          | Fluorides/HF                                | Initial | 60-months |
|                          | Lead  | Initial | 60-months |
|                          | HCL   | Initial | 60-months |
|                          | Hg  | Initial | Hg CEM*** |

f-filterable; c-condensable

\*or may use CEM equivalent, such as parametric monitoring that may be approved by the Executive Secretary

\*\*or parametric monitoring that may be approved by the Executive Secretary

\*\*\* 40 CFR 60, Appendix B, Performance Specification 12a (CEM) (Proposed Rules, Federal Register, Vol. 69, No. 20, January 30, 2004, page 4744) or 40 CFR 63, Appendix B, Method 324 (Sorbent Trap Sampling) (Proposed Rules, Federal Register, Vol. 69, No. 20, January 30, 2004, page 4736) or other testing methods that may be approved.

B. Testing Status (To be applied to the source listed above)

Initial: Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source.

Annual: Test at least every year. The Executive Secretary may require testing at any time.

60-months: Test at least every five years. The Executive Secretary may require testing at any time.

CEM: After the initial compliance test, compliance shall be demonstrated through use of a Continuous Emissions Monitoring System (CEMs) as outlined in Condition below. The Executive Secretary may require testing at any time.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other approved methods.

F. PM/PM<sub>10</sub>

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201, 201A, or other approved methods. The back half condensibles shall also be tested using the method 202 or other approved methods. All particulate captured shall be considered PM<sub>10</sub>.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists (or for PM determination), then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5A, 5B, or 5D, or as appropriate, or other approved methods. The back half condensibles shall also be tested using the Method 202 or other approved methods. The portion of the front half of the catch considered PM<sub>10</sub> shall be based on information in Appendix B of the fifth edition of the EPA document, AP-42, or other data acceptable to the Executive Secretary.

The back half condensibles shall not be used for compliance demonstration for PM (filterable) limit but shall be used for inventory purposes.

For determination of compliance with PM<sub>10</sub> limit, both the front and backhalf catches shall be used.

G. Sulfur Dioxide (SO<sub>2</sub>)

40 CFR 60, Appendix A, Method 6, 6A, 6B, 6C or other approved methods

H. Nitrogen Oxides (NO<sub>x</sub>)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E or other approved methods

I. Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>)

40 CFR 60, Appendix A, Method 8, 8A or other approved methods

J. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other approved methods.

K. Volatile Organic Compounds (VOCs)

40 CFR 60, Appendix A, Method 25 or 25A or other approved methods.

L. Hydrogen chloride (HCl)

40 CFR 60, Appendix A, Method 26 or 26A or other approved methods.

M. Fluorides/Hydrogen fluoride (HF-hydrofluoric acid)

40 CFR 60, Appendix A, Method 26 or 26A or other approved methods.

N. Lead

40 CFR 60, Appendix A, Method 12 or other approved methods.

O. Mercury

ASTM Method D6784-02 or 40 CFR 60, Appendix A, Method 29 or other approved methods.

P. Calculations for Testing Results

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.



Q. New Source Operation

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the production rate listed in this AO. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

1. Testing shall be at no less than 90% of the production rate achieved to date.
2. If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate, but not more than the maximum allowable production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.
3. The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved.

R. Existing Source Operation

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years

11. Differential pressure range at the indicated points shall be within the following values

Unit 3 Dust Collectors

| <u>Source</u>  | <u>Differential pressure range across the<br/>dust collector</u><br>(Inches of water gage) |
|--|--|
| Fly Ash Storage Silo 1C Loading Spout Vent (EP-171)..... | 0.5 to 12*   |
| Fly Ash Storage Silo 1D Vent (EP-172).....               | 0.5 to 12*   |
| Coal Transfers Building #5 Vent (EP-127).....            | 0.5 to 12*   |
| Coal East Storage Silo Bay (EP-128).....                 | 0.5 to 12*   |
| Coal West Storage Silo Bay (EP-129).....                 | 0.5 to 12*   |

\*If differential pressure is less than 2 inches or greater than 10 inches, work orders will be written to investigate. Dust collector may run in the 0.5 to 2 or 10 to 12 range if reason is known. Recording of the reading is required on a monthly basis. The instrument shall be calibrated against a primary standard annually. Preventive maintenance shall be done quarterly on each baghouse.

12. Visible emissions from the emission points covered under this AO shall not exceed the following values:

- A. All baghouses (including the Unit 3 main boiler stack) - 10% opacity. *During periods of startup and shutdown Condition 13 and Condition 24 shall apply.*
- B. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions from intermittent sources shall use proposed Method 203 A, B, and C, as applicable. For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

13. ~~IPSC shall abide by a boiler manufacturer written instructions and/or written procedures developed and maintained by IPSC for the Unit 3 main boiler startup, shutdown, and malfunction periods. These instructions and/or written procedures shall be available to the Executive Secretary or Executive Secretary's representative upon request.~~  
*IPSC shall develop, implement, and maintain a written startup and shutdown work practice plan (Plan) that describes, in detail, procedures for operating and maintaining the Unit 3 main boiler, including associated air pollution control and monitoring equipment, during periods of startup and shutdown. The Plan shall be submitted to the Executive Secretary at least 180 days prior to the initial startup of the Unit 3 main boiler.*
  - A. *For NO<sub>x</sub>, startup begins with introduction of fuel into the boiler at ambient indoor temperature and ends when the flue gas exiting the SCR is above 600 degrees F. Shutdown begins when the SCR is below 600 degrees F and ends when the fuel is turned off.*
  - B. *For PM<sub>10</sub>, startup begins with introduction of fuel into the boiler at ambient indoor temperature and ends when the outlet temperature of the main boiler baghouse is above 210 degrees F and less than 10 percent of the boiler heat input is furnished by fuel oil. Shutdown begins when the baghouse is below 210 degrees F and more than 10 percent of the boiler heat input is furnished by fuel oil and ends when the fuel is turned off.*
  - C. *For opacity, startup and shutdown are defined the same as for PM<sub>10</sub>.*
  - D. *Plan shall contain steps to minimize, to the maximum extent practicable, the frequency and duration of operation in startup or shutdown mode. This shall include, but not necessarily be limited to, careful and prudent design, planning, operation, and maintenance so as to avoid unnecessary, preventable, or unreasonably frequent or lengthy startups and shutdowns. Bypass of associated air pollution control equipment shall only be used to prevent loss of life, personal injury, or severe property damage.*
  - E. *IPSC shall keep records which demonstrate that IPSC complied with the general duty to minimize emissions during periods of startup and shutdown, as set forth in Condition 24. These records shall include the time and date of occurrence and duration of each startup and shutdown as well as any other pertinent information.*
  - F. *IPSC may periodically revise the startup and shutdown plan for the affected source as necessary to satisfy the requirements of this Condition or to reflect changes in equipment or procedures at the affected source. Each such revision to the startup and shutdown plan must be submitted to the Executive Secretary.*
14. The following Unit 3 boiler heat rate and consumption limits shall not be exceeded:

- A. 9050 million British Thermal Units (MMBtu) per hour full load heat input rate for Unit 3 boiler, using Higher Heating Value HHV of the fuel.
- B. 3,541,248 tons of coal burned per rolling 12-month period

Records of consumption/heat rate input shall be kept for all periods when the plant is in operation. The records of consumption/production shall be kept on a daily basis.

- 15. Unit 1 & 2 emergency generator located at (source ID102) shall be tested for maintenance only during the periods between 6:00AM and 6:00 PM. Records of the time, date, and duration of emergency generator testing shall be determined by supervisor monitoring and maintaining of an operations log.

### **Roads and Fugitive Dust**

- 16. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.
- 17. IPSC shall abide by a fugitive dust control plan acceptable to the Executive Secretary for the control of all dust sources associated with the addition of Unit 3 at the Intermountain Power Generation site. IPSC shall submit a fugitive dust control plan to the Executive Secretary, Attention: Compliance Section, for approval within 90 days of the date of this AO. This plan shall contain sufficient controls to prevent an increase in PM<sub>10</sub> emissions above those modeled for this AO. In addition, as a minimum the following control measures shall be included in the plan:
  - a. Vacuum street sweeping for paved haul roads;
  - b. Chemical stabilization for unpaved haul roads;
  - c. Water sprays for conditioned sludge handling;
  - d. Wet suppression with chemicals for long term reserve and emergency coal storage piles;
  - e. Surfactants and compaction for active coal storage piles and their maintenance;
  - f. Telescopic chute, enclosures and surfactants for coal handling.

Any changes of the conditions established in the fugitive dust control plan must be approved by the Executive Secretary.

- 18. Visible fugitive dust emissions from Unit 3 haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made ½ vehicle length or greater behind the vehicle and at approximately ½ the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

### **Fuels**

- 19. The owner/operator shall use either bituminous or blend of bituminous and up to thirty percent subbituminous coals as a primary fuel, blended to meet emission performance

standards. The owner/operator shall use fuel oil during the startups, shutdowns, maintenance, upset conditions and flame stabilization in the Unit 3  $9050 \times 10^6$  Btu/hr boiler. The owner/operator may blend self-generated used oil with coal at the active coal pile reclaim structure providing record that self-generated used oil has not been mixed with hazardous waste.

20. The sulfur content of any fuel oil burned shall not exceed:

0.85 lb per  $10^6$  Btu heat input for fuel used in the Unit 3  $9050 \times 10^6$  Btu/hr boiler

The sulfur content shall comply with all applicable sections of R307-203. Methods for determining sulfur content of coal shall be those methods of the American Society for Testing and Materials

- A. For determining sulfur content in coal, ASTM Methods D3177-75 or D4239-85 are to be used.
- B. For determining the gross calorific (or Btu) content of coal, ASTM Methods D2015-77 or D3286-85 are to be used.
- C. The sulfur content of fuel oil shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of fuel oil shall either be by SPC's own testing or test reports from the fuel oil marketer.

#### **Federal Limitations and Requirements**

- 21. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18, Subpart Da, 40 CFR 60.40a to 60.49a (Standards of Performance for Electric Utility Steam Generating Units for Which Construction in Commenced After September 18, 1978), Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants), and 40 CFR 64 (Compliance Assurance Monitoring for Major Stationary Sources) apply to this installation.
- 22. In addition to the requirements of this AO, all applicable provisions of 40 CFR Part 72, 73, 75, 76, 77, and 78 - Federal regulations for the Acid Rain Program under Clean Air Act Title IV apply to this installation.

#### **Monitoring - General Process**

- 23. The owner/operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMs) on the main boilers stacks and  $\text{SO}_2$  removal scrubbers inlets. The owner/operator shall record the output of the system, for measuring the opacity,  $\text{SO}_2$ , CO, and  $\text{NO}_x$  emissions. The monitoring system shall comply with all applicable sections of R307-170, UAC; and 40 CFR 60, Appendix B.

All continuous emissions monitoring devices as required in federal regulations and state rules shall be installed and operational prior to placing the affected source in operation.

Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under paragraph (d) 40 CFR 60.13, the owner/operator of an affected source

shall continuously operate all required continuous monitoring devices and shall meet minimum frequency of operation requirements as outlined in 40 CFR 60.13 and Section UAC R307-170.

### Records & Miscellaneous

24. ~~The condition below applies to IPSC during periods of scheduled maintenance, startup, or shutdown unless periods of scheduled maintenance, startup, or shutdown are addressed by the Utah Administrative Code.~~

~~Excess emissions due to scheduled maintenance, startup, or shutdown shall constitute a violation. However, the incident may qualify for an affirmative defense as outlined below. If IPSC has emissions in excess of an applicable emission limitation due to scheduled maintenance, startup, or shutdown they may have an affirmative defense to a civil, administrative, or other proceeding, other than an action seeking injunctive relief, and they could be excused from penalties if they have demonstrated all of the following:~~

- ~~A. Excess emissions that occurred during scheduled maintenance, startup or shutdown were short and infrequent and could not have been prevented through careful planning and design consistent with good industry practices;~~
- ~~B. The excess emissions were not part of a recurring pattern indicating inadequate design, operation, or maintenance;~~
- ~~C. If the excess emissions were caused by an intentional bypass of control equipment, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;~~
- ~~D. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions such as manufacturers' recommendations and general industry adopted practices;~~
- ~~E. The frequency and duration of operation in scheduled maintenance, startup, or shutdown mode were minimized to the extent practicable;~~
- ~~F. All practicable steps were taken to minimize the impact of the excess emissions on ambient air quality;~~
- ~~G. All emission monitoring systems were kept in operation if possible;~~
- ~~H. The owner or operator's actions during the period of excess emissions were documented by contemporaneous operating logs or other relevant evidence;~~
- ~~I. The owner or operator provided notice in accordance with R307-107-2, if required; and~~
- ~~J. The excess emissions did not cause or contribute to an exceedance of the NAAQS or PSD increments.~~

~~IPSC shall report to the Executive Secretary any excess emissions due to scheduled maintenance, startup, or shutdown with a duration of 2 hours or longer as outlined below. Failure to comply with the following reporting requirements and procedures shall preclude the use of the affirmative defense.~~

- A. ~~Initial Report.~~ IPSC shall notify the Executive Secretary by telephone or facsimile within 3 hours of the time they first learn of the occurrence of excess emissions of a duration of 2 hours or longer. The notification shall include the information listed in paragraph (b) below to the extent that information is available at the time of the initial report.
- B. ~~Detailed Report.~~ In the case of excess emissions with a duration of two hours or longer, IPSC shall provide the Executive Secretary with a detailed excess emissions report in writing within 7 calendar days of the time the initial report was due. The report shall include the following:
- (i) ~~The company name and location, and the identity of each stack or other emission point where the excess emissions occurred;~~
  - (ii) ~~The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;~~
  - (iii) ~~The date, starting time, and duration or expected duration of the excess emissions to include indicating who first identified the excess emissions and when;~~
  - (iv) ~~The identity of the equipment from which the excess emissions emanated;~~
  - (v) ~~A specific explanation of the cause and nature of the emissions;~~
  - (vi) ~~The steps taken to remedy the excess emissions, and the steps taken or planned to prevent the recurrence of the excess emissions;~~
  - (vii) ~~The steps that were or are being taken to limit the excess emissions; and~~
  - (viii) ~~The steps taken to comply with any applicable procedures governing operations during periods of excess emissions.~~

25.24 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source, *and records required in Condition 13*. All maintenance performed on equipment authorized by this AO shall be recorded.

26.25 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.

27.26 The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

Under R307-150-1, the Executive Secretary may require a source to submit an emission inventory for any full or partial year on reasonable notice.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: <http://www.airquality.utah.gov/>

The annual emissions estimations below are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential to Emit (PTE) emissions for the entire Unit 3 operations are currently calculated at the following values:

|    | <u>Pollutant</u>                     | <u>Tons/yr</u> |
|----|--------------------------------------|----------------|
| A. | PM <sub>10</sub> (filterable).....   | 496.5          |
| B. | SO <sub>2</sub> .....                | 3,567.5        |
| C. | NO <sub>x</sub> .....                | 2775           |
| D. | CO.....                              | 5946           |
| E. | VOC.....                             | 107            |
| F. | H <sub>2</sub> SO <sub>4</sub> ..... | 174            |
| G. | Lead.....                            | 0.79           |
| H. | Total Reduced Sulfur.....            | 29             |
| I. | Reduced Sulfur Compounds.....        | 29             |
| J. | HAPs                                 |                |
|    | Mercury.....                         | 0.0413         |
|    | Hydrochloric Acid (HCL).....         | 167.01         |
|    | Fluorides/HF.....                    | 20             |
|    | Total HAPs.....                      | 199            |

Approved By:

Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

Continuous  
Emission





State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

DAQ-058-2005

**TO:** Air Quality Board

**THROUGH:** Rick Sprott, Executive Secretary

**FROM:** Norman A. Erikson, Environmental Scientist

**DATE:** August 4, 2005

**SUBJECT:** PROPOSE FOR PUBLIC COMMENT: Amend R307-170, Continuous Emission Monitoring Program

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A written comment was received by the Division of Air Quality on March 7, 2005, noting that the requirements of R307-170, the continuous emissions monitoring, are different from the current version of 40 CFR Part 75, CEM provisions of the federal Acid Rain program. The intent of R307-170 was to be the same as Part 75. We reviewed this comment and found that the performance audit requirements of R307-170-7, Performance Specification Audits, conflict with 40 CFR Part 75, Appendix A, Section 6.2 performance audits requirements for acid rain monitors with an instrument range of equal to or less than 30-ppm.

R307-170-7 requires each source operating a continuous emissions monitoring system to perform a quarterly performance audit on each range of a dual range monitor. Alternatively, 40 CFR Part 75 requires dual range analyzers (low and high) to be installed on acid rain sources. However, 40 CFR 75, Appendix A, Section 6.2 exempts NOx monitors with a span range equal to or less than 30-ppm from the quarterly linearity test, performance audit, and requirements. Consequently, we have drafted revisions to R307-170, to make the rules consistent, for your consideration.

In addition, other minor grammatical and punctuation corrections were made to the language throughout the rule.

Staff Recommendation: Staff recommends that R307-170 be proposed for public comment. A copy of the proposal is attached.

**R307. Environmental Quality, Air Quality.**

**R307-170. Continuous Emission Monitoring Program.**

**R307-170-1. Purpose.**

The purpose of this rule is to establish consistent requirements for all sources required to install a continuous monitoring system (CMS) and for sources who opt into the continuous emissions monitoring program.

**R307-170-2. Authority.**

Authority to require continuous emission monitoring devices is found in 19-2-104(1)(c), and authorization for a penalty for rendering inaccurate any monitoring device or method is found in 19-2-115(4). Authority to enforce 40 CFR Part 60 is obtained by its incorporation by reference under R307-210.

**R307-170-3. Applicability.**

Except as noted in (1) and (2) below, any source required to install a continuous monitoring system to determine emissions to the atmosphere or to measure control equipment efficiency is subject to R307-170.

(1) Any source subject to 40 CFR Part 60 as incorporated by R307-210, Standards of Performance for New Sources, is not subject to R307-170-6, Minimum Monitoring Requirements for Specific Sources.

(2) Any source required by an approval order issued under R307-401 to operate a continuous monitoring system to satisfy the requirements of R307-150, Periodic Reports of Emissions and Availability of Information, is not subject to R307-170-9(7), Excess Emission Report.

**R307-170-4. Definitions.**

The following additional definitions apply to R307-170.

"Accuracy" means the difference between a continuous monitoring system response and the results of an applicable EPA reference method obtained over the same sampling time.

"Averaging Period" means that period of time over which a pollutant or opacity is averaged to demonstrate compliance to an emission limitation or standard.

"Block Averages" means the total time expressed in fractions of hours over which emission data is collected and averaged.

"Calibration Drift" (zero drift and span drift) means the value obtained by subtracting the known standard or reference value from the raw response of the continuous monitoring system.

"Channel" means the pollutant, diluent, or opacity to be monitored.

"CMS Information" means the identifying information for each continuous monitoring system a source is required to install.

"Computer Enhancement" means computerized correction of a monitor's zero drift and span drift to reflect actual emission concentrations and opacity.

"Continuous Emission Monitoring System" (CEMS) [—] means all equipment required to determine gaseous emission rates and to record the resulting data.

"Continuous Monitoring System" (CMS) [—] means all equipment required to determine gaseous emission rates or opacity and to record the data.

"Continuous Opacity Monitoring System" means all equipment required to determine opacity and data recording.

"Cylinder Gas Audit" means an alternative relative accuracy test of a continuous emission monitoring system to determine its precision using gases certified by or traceable to National Institute of Standards and Technology (NIST) in the ranges specified in 40 CFR 60, Appendix F.

"Description Report" means a short but accurate description of events that caused continuous monitoring system ~~irregularities~~ or excess emissions ~~[which]that~~ occurred during the reporting period submitted in the state electronic data report.

"Excess Emission Report" means a report within the state electronic data report ~~[which]that~~ documents the date, time, and magnitude of each excess emission episode occurring during the reporting period.

"Excess Emissions" means the amount by which recorded emissions exceed those allowed by approval orders, operating permits, the state implementation plan, or any other provision of R307.

"Monitor" means the equipment in a continuous monitoring system that analyzes concentration or opacity and generates an electronic signal ~~[which]that~~ is sent to a recording device.

"Monitor Availability" means any period in which both the source of emissions and the continuous monitoring system are operating and the minimum frequency of data capture occurred as required in 40 CFR 60.13.

"Monitor Unavailability" means any period in which the source of emissions is operating and the continuous monitoring system is:

- a. not operating or minimum data capture did not occur,
- b. not generating data, not recording data, or data is lost,

or

- c. out-of-control in the case of a continuous emissions monitor used for continuous compliance purposes.

"New Source Performance Standards" (NSPS) means 40 CFR 60, Standards of Performance for New Stationary Sources, incorporated by reference at R307-210.

"Operations Report" means the report of all information required under 40 CFR 60 for utilities and fossil fuel fired boilers.

"Performance Specification" means the operational tolerances for a continuous monitoring system as outlined in 40 CFR 60, Appendix B.

"Precision" means the difference between a continuous monitoring system response and the known concentration of a calibration gas or neutral density filter.

"Quality Assurance Calibrations" means calibrations, drift adjustments, and preventive maintenance activities on a continuous monitoring system.

"Raw Continuous Monitoring System Response" means a continuous monitoring system's uncorrected response used to determine calibration drift.

"Relative Accuracy Audit" means an alternative relative accuracy test procedure outlined in 40 CFR 60, Appendix F, which is used to correlate continuous emission monitoring system data to simultaneously collected reference method test data, as outlined

in 40 CFR Part 60, Appendix A, using no fewer than three reference method test runs.

"Relative Accuracy Test Audit" means the primary method of determining the correlation of continuous emissions monitoring system data to simultaneously collected reference method test data, using no fewer than nine reference method test runs conducted as outlined in 40 CFR 60, Appendix A.

"State Electronic Data Report" (SEDR) means the sum total of ~~a source's~~ monitoring activities ~~[which]~~that occurred during a reporting period.

"Summary Report" means the summary of all monitor and excess emission information ~~[which]~~that occurred during a reporting period.

"Tamper" means knowingly:

- a. to make a false statement, representation, or certification in any application, report, record, plan, or other document filed or required to be maintained under R307-170, or
- b. to render inaccurate any continuous monitoring system or device or any method required to maintain the accuracy of the continuous monitoring system or device.

"Valid Monitoring Data" means data collected by an accurately functioning continuous monitoring system while any installation monitored by the continuous monitoring system is in operation.

#### **R307-170-5. General Requirements.**

(1) Each source required to operate a continuous monitoring system is subject to the requirements of 40 CFR 60.13 (d) through (j), except as follows:

(a) When minimum emission data points are collected by the continuous monitoring system as required in 40 CFR 60.13 or applicable subparts, quality assurance calibration and maintenance activities shall not count against monitor availability.

(b) ~~[a]~~A monitor's unavailability due to calibration checks, zero and span checks, or adjustments required in 40 CFR 60.13 or R307-170 will not be considered a violation of R307-170.

(c) Monitor unavailability due to continuous monitoring system breakdowns will not be considered a monitor unavailability violation provided that the owner or operator demonstrates that the malfunction was unavoidable and was repaired expeditiously.

(d) To supplement continuous monitor data, a source with minimum continuous monitoring system data collection requirements may conduct applicable reference method tests outlined in 40 CFR 60, Appendix A, or as directed in the source's applicable Subpart of the New Source Performance Standards.

(2) Each source shall monitor and record all emissions data during all phases of source operations, including start-ups, shutdowns, and process malfunctions.

(3) Each source operating a continuous emissions monitoring system for compliance determination shall document each out-of-control period in the state electronic data report.

(4) Each continuous monitoring system subject to R307-170 shall be installed, operated, maintained, and calibrated in accordance with applicable performance specifications found in 40 CFR 60 Appendix B and Appendix F.

(5) Each continuous emissions monitoring system shall be configured so that calibration gas can be introduced at or as near

to the probe inlet as possible. Each source shall conduct daily calibration zero drift and span drift checks and cylinder gas audits by flowing calibration gases at the probe inlet, or as near to the probe inlet as possible. Daily calibration drift checks and quarterly cylinder gas audit data shall be recorded by the continuous emissions monitoring system electronically to a strip chart recorder, data logger, or data recording devices.

(6) No person shall tamper with a continuous monitoring system.

(7) Any source that constructs two or more emission point sources ~~[which]~~that may interfere with visible emissions observations shall install a continuous opacity monitor to show compliance with visible emission limitations on each obstructed stack, duct or vent that has a visible emission limitation.

**R307-170-6. Minimum Monitoring Requirements for Specific Sources.**

(1) Fossil Fuel Fired Steam Generators.

(a) A continuous monitoring system for the measurement of opacity shall be installed, calibrated, maintained, and operated on any fossil fuel fired steam generator of greater than 250 million BTU per hour for each boiler except where:

(i) natural gas or oil or a mixture of natural gas and oil is the only fuel burned,

(ii) the source is able to comply with the applicable particulate matter and opacity regulations without using particulate matter collection equipment, and

(iii) the source has never been found through any administrative or judicial proceeding to be in violation of any visible emission standard or requirements.

(b) A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated on any fossil fuel fired steam generator of greater than 250 million BTU per hour heat input which has installed sulfur dioxide pollution control equipment.

(c) A continuous monitoring system for the measurement of nitrogen oxides shall be installed, calibrated, maintained, and operated on fossil fuel fired steam generators of greater than 1000 million BTU per hour heat input when such facility is located in an Air Quality Control Region where the executive secretary has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the national standards, unless the source owner or operator demonstrates during source compliance tests as required by the executive secretary that such a source emits nitrogen oxides at levels 30 percent or more below the emission standard.

(d) A continuous monitoring system for the measurement of percent oxygen or carbon dioxide shall be installed, calibrated, maintained, and operated on any fossil fuel fired steam generators where measurements of oxygen or carbon dioxide in the flue gas are required to convert either sulfur dioxide or nitrogen oxides continuous emission monitoring data, or both, to units of the emission standard.

(2) Nitric Acid Plants.

Each nitric acid plant of greater than 300 tons per day production capacity, the production capacity being expressed as 100 percent acid, and located in an Air Quality Control Region

where the Executive Secretary has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the national standard, shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of nitrogen oxides for each nitric acid producing installation.

(3) Sulfuric Acid Plants - Burning and Production.

Each sulfuric acid plant of greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall install, calibrate, maintain and operate a continuous monitoring system for the measurement of sulfur dioxide for each sulfuric acid producing installation within such plant.

(4) Petroleum Refineries - Fluid Bed Catalytic Cracking Unit Catalyst Regenerator.

Each catalyst regenerator for fluid bed catalytic cracking units of greater than 20,000 barrels per day fresh feed capacity shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity.

**R307-170-7. Performance Specification Audits.**

(1) Quarterly Audits.

Unless otherwise stipulated for sources subject to the Acid Rain Provisions of the Clean Air Act in 40 CFR Part 75 CEM, Appendix A, Section 6.2, as in effect on July 1, 2005, [E]each continuous emissions monitoring system shall be audited at least once each calendar quarter. Successive quarterly audits shall be conducted at least two months apart. A relative accuracy test audit shall be conducted at least once every four calendar quarters as described in the applicable performance specification of 40 CFR 60, Appendix B.

(a) Relative accuracy shall be determined in units of the applicable emission limit.

(b) An alternative relative accuracy test (cylinder gas audit or relative accuracy audit) may be conducted in three of the four calendar quarters in place of conducting a relative accuracy test audit, but in no more than three quarters in succession.

(c) Each range of a dual range monitor shall be audited using an alternative relative accuracy audit procedure.

(d) Minor deviations from the reference method test must be submitted to the executive secretary for approval.

(e) Performance specification tests and audits shall be conducted so that the entire continuous monitoring system is concurrently tested.

(2) Notification.

The source shall notify the executive secretary of its intention to conduct a relative accuracy test audit by submitting a pretest protocol or by scheduling a pretest conference if directed to do so by the executive secretary. Each source shall notify the executive secretary no less than 45 days prior to testing.

(3) Audit Procedure.

A source may stop a relative accuracy test audit before the commencement of the fourth run to perform repairs or adjustments on the continuous emissions monitoring system. If the audit is stopped to make repairs or adjustments, the audit must be started again from the beginning. If the fourth test run is started, testing shall be conducted until the completion of the ninth

acceptable test run or the source may declare the monitor out-of-control and stop the test. If the system does not meet its applicable relative accuracy performance specification outlined in 40 CFR 60, Appendix B, its data may not be used in determining emissions rates until the system is successfully recertified.

(4) Performance Specification Tests.

(a) Except as listed in (b) below, all reference method testing equipment shall be totally independent of the continuous emissions monitoring system equipment undergoing a performance specification test.

(b) Reference method tests conducted on fuel gas lines, vapor recovery units, or other equipment as approved by the executive secretary may use a common probe, when the reference method sample line ties into the continuous emission monitor's probe or sample line as close to the probe inlet as possible.

(5) Submittal of Audit Results.

The source shall submit all relative accuracy performance specification test reports to the executive secretary no later than 60 days after completion of the test.

(a) Test reports shall include all raw reference method calibration data, raw reference method emission data with date and time stamps, and raw source continuous monitoring data with date and time stamps. All data shall be reported in concentration and units of the applicable emission limit.

(b) Relative accuracy performance specification test or audit reports shall include the company name, plant manager's name, mailing address, phone number, environmental contact's name, the monitor manufacturer, the model and serial number, the monitor range, and its location.

(6) Daily Drift Test.

Each source operating a continuous monitoring system shall conduct a daily zero and span calibration drift test as required in 40 CFR 60.13(d). The zero and span drifts shall be determined by using raw continuous monitoring system responses to a known value of the reference standard. Computer enhancements may be used to correct continuous monitoring system emission data [which]that has been altered by monitor drift, but may not be used to determine daily zero and span drift.

(a) A monitor used for compliance [which]that fails the daily calibration drift test as outlined in 40 CFR 60 Appendix F, Subpart 4, shall be declared out-of-control, and the out-of-control period shall be documented in the state electronic data report. The source shall make corrective adjustments to the system promptly. Continuous emission monitoring system data collected during the out-of-control period may not be used for monitor availability.

(b) Each source operating a continuous monitoring system [which]that exceeds the calibration drift limit as outlined in 40 CFR 60 and the applicable performance specification shall make corrective adjustments promptly.

**R307-170-8. Recordkeeping.**

Each source subject to this rule shall maintain a file of all:

(1) parameters for each continuous monitoring system and monitoring device,

- (2) performance test measurements,
- (3) continuous monitoring system performance evaluations,
- (4) continuous monitoring system or monitoring device calibration checks,
- (5) adjustments and maintenance conducted on these systems or devices, and
- (6) all other information required by this rule. Information shall be recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, and shall be available to the executive secretary at any time.

**R307-170-9. State Electronic Data Report.**

(1) General Reporting Requirements.

(a) Each source required to install a continuous monitoring system shall submit the state electronic data report including all information specified in (2) through (10) below. Each source shall submit a complete, unmodified report in an electronic ASCII format specified by the executive secretary.

(b) Partial Reports.

(i) If the total duration of excess emissions during the reporting period is less than one percent of the total operating time and the continuous monitoring system downtime is less than five percent of the total operating time, only the summary portion of the state electronic data report need be submitted.

(ii) If the total excess emission during the reporting period is equal to or greater than one percent of the total operating time, or the total monitored downtime is equal to or greater than five percent of the total operating time, the total state electronic data report shall be submitted.

(iii) Each source required to install a continuous monitoring system for the sole purpose of generating emissions inventory data is not required to submit the excess emission report required by (7) below or the excess emission summary required by (6)(b) below, unless otherwise directed by the executive secretary.

(c) Frequency of Reporting. Each source subject to this rule shall submit a report to the executive secretary with the following frequency:

(i) Each source shall submit a report quarterly, if required by the executive secretary or by 40 CFR Part 60, or if the continuous monitoring system data is used for compliance determination. Each source submitting quarterly reports shall submit them by January 30, April 30, July 30, and October 30 for the quarter ending 30 days earlier.

(ii) Any source subject to this rule and not required to submit a quarterly report shall submit its report semiannually by January 30 and July 30 for the six month period ending 30 days earlier.

(iii) The executive secretary may require any source to submit all emission data generated on a quarterly basis.

(2) Source Information.

The report shall contain source information including the company name, name of manager or responsible official, mailing address, AIRS number, phone number, environmental contact name, each source required to install a monitoring system, quarter or



quarters covered by the report, year, and the operating time for each source.

(3) Continuous Monitoring System Information.

The report shall identify each channel, manufacturer, model number, serial number, monitor span, installation dates, and whether the monitor is located in the stack or duct.

(4) Monitor Availability Reporting.

(a) The report shall include all periods that the pollutant concentration exceeded the span of the continuous monitoring system by source, channel, start date and time, and end date and time.

(b) Each continuous monitoring system outage or malfunction which occurs during source operation shall be reported by source, channel, start date and time, and end date and time.

(c) When it becomes necessary to supplement continuous monitoring data to meet the minimum data requirements, the source shall use applicable reference methods and procedures as outlined in 40 CFR 60, or as stipulated in the source's applicable Subpart of the New Source Performance Standards. Supplemental data shall be reported by source, channel, start date and time, and end date and time, and may be used to offset monitor unavailability.

(d) Monitor modifications shall be reported by source, channel, date of modification, whether a support document was submitted, and the reason for the modification.

(5) Continuous Monitoring System Performance Specification Audits.

(a) Each source shall submit the results of each relative accuracy test audit, relative accuracy audit and cylinder gas audit. Each source ~~which~~ that reports linearity tests may omit reporting cylinder gas audits.

(b) Each relative accuracy test audit shall be reported by source, channel, date of the most current relative accuracy test audit, date of the preceding relative accuracy test audit, number of months between relative accuracy test audits, units of applicable standard, average continuous emissions monitor response during testing, average reference method value, relative accuracy, and whether the continuous emissions monitor passed or failed the test or audit.

(c) A relative accuracy audit shall be reported by source, channel, date of audit, continuous emissions monitor response, relative accuracy audit response, percent precision, pass or fail results, and whether the monitor range is high or low.

(d) Cylinder gas audit and linearity tests shall be reported by source, channel, date, audit point number, cylinder identification, cylinder expiration date, type of certification, units of measurement, continuous emissions monitor response, cylinder concentration, percent precision, pass or fail results, and ~~and~~ whether the monitor range is high or low.

(6) Summary reports.

(a) Each source shall summarize and report each continuous monitoring system outage that occurred during the reporting period in the continuous monitoring system performance summary report. The summary must include the source, channels, monitor downtime as a percent of the total source operating hours, total monitor downtime, hours of monitor malfunction, hours of non-monitor malfunction, hours of quality assurance calibrations, and hours of

other known and unknown causes of monitor downtime. A source operating a backup continuous monitoring system must account for monitor unavailability only when accurate emission data are not being collected by either continuous monitoring system.

(b) The summary report shall contain a summary of excess emissions ~~[which]~~that occurred during the reporting period unless the continuous monitoring system was installed to document compliance with an emission cap or to generate data for annual emissions inventories.

(i) Each source with multiple emission limitations per channel being monitored shall summarize excess emissions for each emission limitation.

(ii) The emission summary must include the source, channels, total hours of excess emissions as a percent of the total source operating hours, hours of start-up and shutdown, hours of control equipments problems, hours of process problems, hours of other known and unknown causes, emission limitation, units of measurement, and emission limitation averaging period.

(c) When no continuous monitoring unavailability or excess emissions have occurred, this shall be documented by placing a zero under each appropriate heading.

(7) Excess Emissions Report.

(a) The magnitude and duration of all excess emissions shall be reported on an hourly basis in the excess emissions report.

(i) The duration of excess emissions based on block averages shall be reported in terms of hours over which the emissions were averaged. Each source that averages opacity shall average it over a six-~~[—]~~minute block and shall report the duration of excess opacity in tenths of an hour. Sources using a rolling average shall report the duration of excess emissions in terms of the number of hours being rolled into the averaging period.

(ii) Sources with multiple emission limitations per channel being monitored shall report the magnitude of excess emissions for each emission limitation.

(b) Each period of excess emissions that occurs shall be reported. Each episode of excess emission shall be accompanied with a reason code and action code ~~[which]~~that links the excess emission to a specific description, which describes the events of the episode.

(8) Operations Report.

Each source operating fossil fuel fired steam generators subject to 40 CFR 60, Standards of Performance for New Stationary Sources, shall submit an operations report.

(9) Signed Statement.

(a) Each source shall submit a signed statement acknowledging under penalties of law that all information contained in the report is truthful and accurate, and is a complete record of all monitoring related events ~~[which]~~that occurred during the reporting period. In addition, each source with an operating permit issued under R307-415 shall submit the signed statement required in R307-415-5d.

(10) Descriptions.

Each source shall submit a narrative description explaining each event of monitor unavailability or excess emissions. Each description also shall be accompanied with reason codes and action

codes that will link descriptions to events reported in the monitoring information and excess emission report.

KEY: air pollution, monitoring, continuous monitoring

~~[December 5, 2002]~~2005

Notice of Continuation August 7, 2000

19-2-101

19-2-104(1)(c)

19-2-115(3)(b)

40 CFR 60

Clearing  
Index



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

DAQ-057-2005

**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Richard Sprott, Executive Secretary

**FROM:** Tyler Cruickshank, Environmental Scientist

**DATE:** August 5, 2005

**SUBJECT:** FINAL ADOPTION: R307-101-2, Update Definition of Clearing Index

---

On June 1, 2005, R307-101-2, an update to the definition of the clearing index, was proposed for public comment. A public hearing was held on July 19. No one attended hearing. The comment period ended on August 1, and no comments have been received.

Staff recommendation: Staff recommends the change in R307-101-2 be adopted as proposed.

Link: [www.rules.utah.gov/Publications \ Utah State Bulletin \ select 2005 \ Vol. 2005, No. 13](http://www.rules.utah.gov/Publications/Utah%20State%20Bulletin/select%202005/Vol.%202005,%20No.%2013.pdf)  
pdf. File to view: Page 24, R307-101-2

N:\RULES\PROPOSED\Clearing Index\AQB 2\memo to AQB2 .doc

▼ ————— ▼

Environmental Quality, Air Quality  
**R307-101-2**  
Definitions

NOTICE OF PROPOSED RULE  
(Amendment)  
DAR File No.: 28029  
FILED: 06/15/2005, 09:02

**RULE ANALYSIS**

PURPOSE OF THE RULE OR REASON FOR THE CHANGE: The purpose of the change is to update the definition of "clearing index" in Utah rules.

SUMMARY OF THE RULE OR CHANGE: The "Clearing Index" is a measure of how efficiently smoke and other air pollutants will disperse in the atmosphere. The index is used to determine if air quality will be degraded by open burning operations (Rule R307-201) or industrial processes as specified in approval orders (Rule R307-401). Beginning in the early 1970s, the

National Weather Service (NWS) began forecasting a daily clearing index for three defined air basins within the State of Utah. The Division of Air Quality made the clearing index values available to government users via fax and a recorded telephone message. In recent years, NWS technological improvements have made it possible to produce highly specific and representative three-day clearing index forecasts for any point within the state. These forecasts are freely available to the public through a simple interface on the NWS web page. This proposal deletes all references to the three-basin clearing index and allows the NWS to apply their best available technology to forecast and disseminate the clearing index. Local government users have been contacted to determine if the new definition and method of accessing the clearing index will be acceptable. All comments received were positive.

STATE STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE: Section 19-2-104

**ANTICIPATED COST OR SAVINGS TO:**

◆ **THE STATE BUDGET:** The Division of Air Quality (DAQ) will save a small amount of time because DAQ will no longer notify local fire departments of the three-basin clearing index each day. Instead, the NWS clearing index information is available on the NWS web site.

◆ **LOCAL GOVERNMENTS:** It is not known whether the new system will save money for local governments. However, the more precise clearing index for specific areas will benefit the local fire departments in knowing when conditions meet the criteria in the rule for issuing permits to allow open burning in their own locales.

◆ **OTHER PERSONS:** Currently, anyone who desires a permit to conduct open burning must wait for the local fire department to determine whether the clearing index meets the rule's criteria for allowing burning. Under the new system, anyone can check the NWS web site for the specific clearing index applicable to the location, and can view the forecast for the next few days in order to pick the best time to conduct the burn. This is clearly a benefit, though no dollar amount can be determined.

**COMPLIANCE COSTS FOR AFFECTED PERSONS:** Currently, anyone who desires a permit to conduct open burning must wait for the local fire department to determine whether the clearing index meets the rule's criteria for allowing burning. Under the new system, anyone can check the NWS web site for the specific clearing index applicable to the location, and can view the forecast for the next few days in order to pick the best time to conduct the burn. This is clearly a benefit, though no dollar amount can be determined.

**COMMENTS BY THE DEPARTMENT HEAD ON THE FISCAL IMPACT THE RULE MAY HAVE ON BUSINESSES:** For businesses whose approval orders require use of the clearing index to determine whether or not burning is allowed, this change will allow more accurate and more timely determinations. Dianne R. Nielson, Executive Director

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:

ENVIRONMENTAL QUALITY  
AIR QUALITY  
150 N 1950 W  
SALT LAKE CITY UT 84116-3085, or  
at the Division of Administrative Rules.

**DIRECT QUESTIONS REGARDING THIS RULE TO:**

Jan Miller at the above address, by phone at 801-536-4042, by FAX at 801-536-4099, or by Internet E-mail at janmiller@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS TO THE ADDRESS ABOVE NO LATER THAN 5:00 PM on 08/01/2005

INTERESTED PERSONS MAY ATTEND A PUBLIC HEARING REGARDING THIS RULE: 7/19/2005 at 1:30 PM, DEQ Building, 1968 N 1950 W, Room 201, Salt Lake City, UT.

THIS RULE MAY BECOME EFFECTIVE ON: 09/08/2005

AUTHORIZED BY: M. Cheryl Heying, Planning Branch Manager

**R307. Environmental Quality, Air Quality.**

**R307-101. General Requirements.**

**R307-101-2. Definitions.**

Except where specified in individual rules, definitions in R307-101-2 are applicable to all rules adopted by the Air Quality Board.

"Clean Air Act" means federal Clean Air Act as amended in 1990.

"Clean Coal Technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

"Clean Coal Technology Demonstration Project" means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

"Clearing Index" means an indicator of the predicted rate of clearance of ground level pollutants from a given area. This number is (calculated) provided by the National Weather Service, [from daily measurements of temperature, lapse rates and wind speeds from ground level to 10,000 feet. The State has been divided into three separate air quality areas for purposes of the clearing index system.]

— (1) Area 1 includes those valleys below 6500 feet above sea level and west of the Wasatch Mountain Range and extending south through the Wasatch and Aquarius Plateaus to the Arizona border. Included are the Salt Lake, Utah, Skull and Escalante Valleys and valleys of the Sevier River Drainage.

— (2) Area 2 includes those valleys below 6500 feet above sea level and east of the Wasatch Mountain Range. Included are Cache Valley, the Uintah Basin, Castle Valley and valleys of the Green, Colorado, and San Juan Rivers.

— (3) Area 3 includes all valleys and areas above 6500 feet above sea level.

"Commence" as applied to construction of a major source or major modification means that the owner or operator has all necessary pre-construction approvals or permits and either has:

(1) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(2) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

"Compliance Schedule" means a schedule of events, by date, which will result in compliance with these regulations.

"Construction" means any physical change or change in the method of operation including fabrication, erection, installation, demolition, or modification of a source which would result in a change in actual emissions.

"Control Apparatus" means any device which prevents or controls the emission of any air contaminant directly or indirectly into the outdoor atmosphere.

KEY: air pollution, definitions

2005

Notice of Continuation June 5, 2003

19-2-104



5-year Review



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

DAQ-056-2005

MEMORANDUM

**TO:** Air Quality Board

**THROUGH:** Rick Sprott, Executive Secretary

**FROM:** Mat Carlile, Environmental Scientist

**DATE:** 8/10/2005

**SUBJECT:** Five-Year Reviews: R307-103, R307-110, R307- 165, R307-201, R307-205, R307-206, R307-302, R307-305, R307-307, R307-309, and R307-310.

**Background**

All state agencies are required by the Utah Administrative Rulemaking Act (Title 63, Chapter 46a) to review each of their rules at least every fifth year. Because the statute defines "agency" as the state board or other entity that is authorized by statute to make rules, the responsibility to complete the review falls to the Air Quality Board.

At the end of the review, the agency must file a notice with the Division of Administrative Rules indicating its intent to continue, amend, or repeal the rule. To continue the rule, the agency must address the requirements in 63-46a-9(3)(a); these requirements are listed on the forms attached<sup>1</sup>. If the agency does not file the form on time, the rule automatically expires, as provided in 63-46a-9(8). Nothing in the review process makes any change in the rule text; if the agency wishes to

<sup>1</sup> The five-year review must include all written comments received since the last review, and the interpretation of the Legislature's Administrative Rules Review Committee is that this includes all comments received during any amendment process, even though the Board has already considered all of those comments and responses. The program used by the Division of Administrative Rules to process agency submittals cannot accept any formatting characters; including tabs or hard returns; therefore, capitalizing titles and subjects is the only acceptable method to indicate separations.

amend or repeal the rule, a separate action is required under the regular rulemaking procedures (public notice, public comment, and final Board adoption).

Following comments we received from members of the Board, we have begun reviewing the rules in functional groups. For example, R307-205, (Emission Standards: Fugitive Emissions and Fugitive Dust), is currently up for its 5-year review, but we have decided to conduct the review for all the PM<sub>10</sub> rules, including those that were just revised as part of the PM<sub>10</sub> Maintenance Plan development, even though many are not due yet.

In this packet, R307-103 (Administrative Procedures), is also included for its 5-year review, since it is due December 7, 2005. A copy of each rule is attached, along with a copy of the review form to be filed with the Division of Administrative Rules. To accommodate public access to rules up for a 5-year review, we have added a section to our web site that explains the process and lists the rules and comments received. Please see: [www.airquality.utah.gov/ADMIN/RULES/rules.htm](http://www.airquality.utah.gov/ADMIN/RULES/rules.htm).

## **Rules**

### **R307-103. Administrative Procedures**

R307-103 sets forth administrative processes for the Division of Air Quality and the regulated community to ensure constitutional due process for the regulated community and the public.

### **R307-110. General Requirements: State Implementation Plan.**

R307-110 incorporates by reference the various sections and parts of the Utah State Implementation Plan (SIP). Without it, EPA might not consider the SIP to be enforceable, and thus not approvable. Without a Utah SIP, EPA would be required to impose Federal Implementation Plans. This rule was last reviewed and continued on March 27, 2002, and a review is not required until 2007. However, it has been amended 12 times since March of 2002, and we have received substantial comments on those changes.

### **R307-165. Emission Testing**

R307-165 regulates the frequency of emission testing requirements for all areas in the state. These regulations are part of the state implementation plan to control PM<sub>10</sub> in geographic areas where levels of pollution have exceeded federal health standards in the past; the plan is incorporated by reference under R307-110-10.

### **R307-201. Emission Standards: General Emission Standards**

R307-201 establishes visible emission standards for sources outside of the PM<sub>10</sub> nonattainment or maintenance area.

### **R307-205. Emission Standards: Fugitive Emissions and Fugitive Dust.**

R307-205 establishes minimum work practices and emission standards for any source of fugitive emissions and fugitive dust outside of the PM<sub>10</sub> nonattainment or maintenance area.

**R307-206. Emission Standards: Abrasive Blasting.**

R307-206 sets forth performance standards and maximum concentration of contaminants allowed in the air for operations that clean or prepare a surface by forcefully propelling a stream of abrasive material against the surface. These regulations apply to source outside PM<sub>10</sub> nonattainment or maintenance areas.

**R307-302. Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves.**

R307-302 identifies no burn periods for residential woodburning stoves and fireplaces in areas that sometimes exceed the health standards for fine particulate and carbon monoxide. The provisions to regulate residential woodburning are part of the requirements to reduce particulates and carbon monoxide that are included in Utah's state implementation plans for PM<sub>10</sub> and carbon monoxide; these plans are incorporated by reference under R307-110-10.

**R307-305. Nonattainment and Maintenance Areas for PM<sub>10</sub>: Emission Standards.**

R307-305 sets visible emission limits, testing methods and schedules, and compliance schedules for sources of air pollution that are regulated under Utah's PM<sub>10</sub> state implementation plan; the plan is incorporated by reference under R307-110-10.

**R307-307. Davis, Salt Lake, and Utah Counties: Road Salting and Sanding.**

Rule R307-307 sets limits on the particulate matter that may be included in salt used on roads. The limits are needed to reduce the particulate matter, and are one of the measures included in Utah's state implementation plan for PM<sub>10</sub>; the plan is incorporated by reference under R307-110-10.

**R307-309. Nonattainment and Maintenance Areas for PM<sub>10</sub>: Fugitive Emissions and Fugitive Dust.**

R307-309 regulates the amount of dust and fugitive emissions that are allowed to leave the site of any source of air pollution. These regulations are part of the state implementation plan to control PM<sub>10</sub> in geographic areas where levels of pollution have exceeded federal health standards in the past; the plan is incorporated by reference under R307-110-10.

**R307-310. Salt Lake County: Trading of Emission Budgets for Transportation Conformity.**

R307-310 establishes a conformity budget for Salt Lake County because the old PM<sub>10</sub> SIP did not. This budget allows continued funding of transportation projects in Salt Lake County. R307-310 will no longer be needed after the EPA approves the new conformity budget, which is established in the PM<sub>10</sub> maintenance plan adopted on July 6, 2005.

Staff Recommendation: Staff recommends that the Board approve the attached forms to be filed with the Division of Administrative Rules.

R307-10

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

|   |  |                            |  |
|---|--|----------------------------|--|
| DAR file no:<br>Utah Admin. R307-103<br>Code ref. (R no.):  |  | Date filed:<br>Time filed: |  |
| 1. Agency: Environmental Quality/Air Quality<br>Room no.:<br>Building:<br>Street address 1: 150 N 1950 W<br>Street address 2:<br>City,state,zip: SALT LAKE CITY, UT 84116-3085<br>Mailing address 1: PO BOX 144820<br>Mailing address 2:<br>City,state,zip: SALT LAKE CITY, UT 84114-4820<br>Contact person(s):<br>Name: Phone: Fax: E-mail: Remove:<br>Mat E. Carlile 801-536-4136 801-536-0085 <a href="mailto:MCARLILE@utah.gov">MCARLILE@utah.gov</a> |  |                            |  |
| (Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)   |  |                            |  |
| 2.  | <b>Title of rule or section (catchline):</b><br>Administrative Procedures  |                            |  |
| 3.  | <b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b><br>The Utah Administrative Procedures Act (UAPA), Utah Code Annotated Subsection 63-46b-1(6), allows state administrative agencies to enact rules "affecting or governing adjudicative proceedings," so long as the rules are adopted according to the Utah Administrative Rulemaking Act and conform to the requirements of UAPA. Rule R307-103 establishes administrative procedures that are tailored to DAQ's administrative needs and the needs of those affected by the agency's actions. The procedures in Rule R307-103 ensure consistency in the Division's administrative actions and give constitutional due process and fair notice to the regulated community and the public of their and the DAQ's roles and responsibilities in the agency's actions. |                            |  |
| 4.  | <b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b> No comments have been received.  |                            |  |
| 5.  | <b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br>R307-103 sets forth administrative processes for the Division of Air Quality and the regulated community to ensure constitutional due process for the regulated community and the public, and should be continued.  |                            |  |
| 6.  | <b>Indexing information – keywords (maximum of four, in lower case):</b><br>air pollution, administrative procedure, hearings  |                            |  |

|   |   |
|---|---|
| 7.  | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing. |
| <b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date. |   |

**AGENCY AUTHORIZATION**

|  |   |                               |           |
|--|---|-------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date<br/>(mm/dd/yyyy):</b> | 8/10/2005 |
|--|---|-------------------------------|-----------|

**R307. Environmental Quality, Air Quality.**

**R307-103. Administrative Procedures.**

**R307-103-1. Scope of Rule.**

(1) This rule R307-103 sets out procedures for conducting adjudicative proceedings under Title 19, Chapter 2, Utah Air Conservation Act, and governed by Title 63, Chapter 46b, the Utah Administrative Procedures Act.

(2) The executive secretary may issue initial orders or notices of violation as authorized by the Board. Following the issuance of an initial order or notice of violation under Title 19, Chapter 2, the recipient, or in some situations other persons, may contest that order or notice in a proceeding before the board or before a presiding officer appointed by the board.

(3) Issuance of initial orders and notices of violation are not governed by the Utah Administrative Procedures Act as provided under 63-46b-1(2)(k) and are not governed by R307-103-3 through R307-103-14 of this Rule. Initial orders and notices of violation are further described in R307-103-2(1).

(4) Proceedings to contest an initial order or notice of violation are governed by the Utah Administrative Procedures Act and by this rule R307-103.

(5) The Utah Administrative Procedures Act and this rule R307-103 also govern any other formal adjudicative proceeding before the Air Quality Board.

**R307-103-2. Initial Proceedings.**

(1) Initial Proceedings Exempt from Utah Administrative Procedures Act. Initial orders and notices of violation include, but are not limited to, initial proceedings regarding:

(a) approval, denial, termination, modification, revocation, reissuance or renewal of permits, plans, or approval orders;

(b) notices of violation and orders associated with notices of violation;

(c) orders to comply and orders to cease and desist;

(d) certification for tank vapor tightness testing under R307-342;

(e) certification of asbestos contractors under R307-801;

(f) fees imposed for major source reviews under R307-414;

(g) assessment of other fees except as provided in R307-103-14(7);

(h) eligibility of pollution control equipment for tax exemptions under R307-120, R307-121, and R307-122;

(i) requests for variances, exemptions, and other approvals;

(j) requests or approvals for experiments, testing or control plans; and

(k) certification of individuals and firms who perform lead-based paint activities and accreditation of lead-based paint training providers under R307-840.

(2) Effect of Initial Orders and Notices of Violation.

(a) Unless otherwise stated, all initial orders or notices of violation are effective upon issuance. All initial orders or notices of violation shall become final if not contested within 30



days after the date issued.

(b) The date of issuance of an initial order or notice of violation is the date the initial order or notice of violation is mailed.

(c) Failure to timely contest an initial order or notice of violation waives any right of administrative contest, reconsideration, review, or judicial appeal.

**R307-103-3. Contesting an Initial Order or Notice of Violation.**

(1) Procedure. Initial orders and notices of violation, as described in R307-103-2(1), may be contested by filing a written Request for Agency Action to the Executive Secretary, Air Quality Board, Division of Air Quality, PO Box 144820, Salt Lake City, Utah 84114-4820.

(2) Content Required and Deadline for Request. Any such request is governed by and shall comply with the requirements of 63-46b-3(3). If a request for agency action is made by a person other than the recipient of an order or notice of violation, the request for agency action shall also specify in writing sufficient facts to allow the board to determine whether the person has standing under R307-103-6(3) to bring the requested action.

(3) A request for agency action made to contest an initial order or notice of violation shall, to be timely, be received for filing within 30 days of the issuance of the initial order or notice of violation.

(4) Stipulation for Extending Time to File Request. The executive secretary and the recipient of an initial order or notice of violation may stipulate to an extension of time for filing the request, or any part thereof.

**R307-103-4. Designation of Proceedings as Formal or Informal.**

(1) Contest of an initial order or notice of violation resulting from proceedings described in R307-103-2(1) shall be conducted as a formal proceeding.

(2) The board in accordance with 63-46b-4(3) may convert proceedings which are designated to be formal to informal and proceedings which are designated as informal to formal if conversion is in the public interest and rights of all parties are not unfairly prejudiced.

**R307-103-5. Notice of and Response to Request for Agency Action.**

(1) The presiding officer shall promptly review a request for agency action and shall issue a Notice of Request for Agency Action in accordance with 63-46b-3(3)(d) and (e). If further proceedings are required and the matter is not set for hearing at the time the Notice is issued, notice of the time and place for a hearing shall be provided promptly after the hearing is scheduled.

(2) The Notice shall include a designation of parties under R307-103-6(4), and shall notify respondents that any response to the Request for Agency Action shall be due within 30 days of the day the Notice is mailed, in accordance with 63-46b-6.

**R307-103-6. Parties and Intervention.**

(1) Determination of a Party. The following persons are parties to an adjudicative proceeding:

(a) The person to whom an initial order or notice of violation is directed, such as a person who submitted a permit application that was approved or disapproved by initial order of the executive secretary;

(b) The executive secretary of the board;

(c) All persons to whom the board has granted intervention under R307-103-6(2); and

(d) Any other person with standing who brings a Request for Agency Action as authorized by the Utah Administrative Procedures Act and these rules.

(2) Intervention.

(a) A Petition to Intervene shall meet the requirements of 63-46b-9. Except as provided in (2)(c), the timeliness of a Petition to Intervene shall be determined by the presiding officer under the facts and circumstances of each case.

(b) Any response to a Petition to Intervene shall be filed within 20 days of the date the Petition was filed, except as provided in R307-103-6(2)(c).

(c) A person seeking to intervene in a proceeding for which agency action has not been initiated under 63-46b-3 may file a Request for Agency Action at the same time he files a Petition for Intervention. Any such Request for Agency Action and Petition to Intervene must be received by the board for filing within 30 days of the issuance of the initial order or notice of violation being challenged. The time for filing a Request for Agency Action and Petition to Intervene may be extended by stipulation of the executive secretary, the person subject to an initial order or notice of violation, and the potential intervenor.

(d) Any response to a Petition to Intervene that is filed at the same time as a Request for Agency Action shall be filed on or before the day the response to the Request for Agency Action is due.

(e) A Petition to Intervene shall be granted if the requirements of 63-46b-9(2) are met.

(3) Standing. No person may initiate or intervene in an agency action unless that person has standing. Standing shall be evaluated using applicable Utah case law.

(4) Designation of Parties. The presiding officer shall designate each party as a petitioner or respondent.

(5) Amicus Curiae (Friend of the Court). A person may be permitted by the presiding officer to enter an appearance as amicus curiae (friend of the court), subject to conditions established by the presiding officer.

**R307-103-7. Conduct of Proceedings.**

(1) Role of Board.

(a) The board is the "agency head" as that term is used in Title 63, Chapter 46b. The board is also the "presiding officer," as that term is used in Title 63, Chapter 46b, except:

(i) The chair of the board shall be considered the presiding officer to the extent that these rules allow; and

(ii) The board may appoint one or more presiding officers to preside over all or a portion of the proceedings.

(b) The chair of the board may delegate the chair's authority as specified in this rule to another board member.

(2) Appointed Presiding Officers. Unless otherwise explicitly provided by written order, any appointment of a presiding officer shall be for the purpose of conducting all aspects of an adjudicative proceeding, except rulings on intervention, stays of orders, dispositive motions, and issuance of the final order. As used in this rule, the term "presiding officer" shall mean "presiding officers" if more than one presiding officer is appointed by the board.

(3) Board Counsel. The Presiding Officer may request that Board Counsel provide legal advice regarding legal procedures, pending motions, evidentiary matters and other legal issues.

(4) Pre-hearing Conferences. The presiding officer may direct the parties to appear at a specified time and place for pre-hearing conferences for the purposes of establishing schedules, clarifying the issues, simplifying the evidence, facilitating discovery, expediting proceedings, encouraging settlement, or giving the parties notice of the presiding officer's availability to parties.

(5) Pre-hearing Documents.

(a) At least 15 business days before a scheduled hearing, the executive secretary shall compile a draft list of prehearing documents as described in (b), and shall provide the list to all other parties. Each party may propose to add documents to or delete document from the list. At least seven business days before a scheduled hearing, the executive secretary shall issue a final prehearing document list, which shall include only those documents upon which all parties agree unless otherwise ordered by the presiding officer. All documents on the final prehearing document list shall be made available to the presiding officer prior to the hearing, and shall be deemed to be authenticated.

(b) The prehearing document list shall ordinarily include any pertinent permit application, any pertinent inspection report, any pertinent draft document that was released for public comment, any pertinent public comments received, any pertinent initial order or notice of violation, the request for or notice of agency action, and any responsive pleading. The list is not intended to be an exhaustive list of every document relevant to the proceeding, however any document may be included upon the agreement of all parties.

(6) Briefs.

(a) Unless otherwise directed by the presiding officer, parties to the proceeding shall submit a pre-hearing brief, which shall include a proposed order meeting the requirements of 63-46b-10, at least seven business days before the hearing. The prehearing brief shall be limited to 20 pages exclusive of the proposed order.

(b) Post-hearing briefs and responsive briefs will be allowed only as authorized by the presiding officer.

(7) Schedules.

(a) The parties are encouraged to prepare a joint proposed schedule for discovery, for other pre-hearing proceedings, for the hearing, and for any post-hearing proceedings. If the parties cannot agree on a joint proposed schedule, any party may submit a proposed schedule to the presiding officer for consideration.

(b) The presiding officer shall establish a schedule for the matters described in (a) above.

(8) Motions. All motions shall be filed a minimum of 12 days before a scheduled hearing, unless otherwise directed by the presiding officer. A memorandum in opposition to a motion may be filed within 10 days of the filing of the motion, or at least one day before any scheduled hearing, whichever is earlier. Memoranda in support of or in opposition to motions may not exceed 15 pages unless otherwise provided by the presiding officer.

(9) Filing and Copies of Submissions. The original of any motion, brief, petition for intervention, or other submission shall be filed with the executive secretary. In addition, the submitter shall provide a copy to each presiding officer, to each party of record, and to all persons who have petitioned for intervention, but for whom intervention has been neither granted nor denied.

#### **R307-103-8. Hearings.**

The presiding officer shall govern the conduct of a hearing, and may establish reasonable limits on the length of witness testimony, cross-examination, oral arguments or opening and closing statements.

#### **R307-103-9. Orders.**

(1) Recommended Orders of Appointed Presiding Officers.

(a) Unless an appointed presiding officer is required by the terms of his appointment to issue a final order, he shall prepare a recommended order for the board, and shall provide copies of the recommended order to the board and to all parties.

(b) Any party may, within 10 days of the date the recommended order is mailed, delivered, or published, comment on the recommended order. Such comments shall be limited to 15 pages and shall cite to the specific parts of the record which support the comments.

(c) The board shall review the recommended order, comments on the recommended order, and those specific parts of the record cited by the parties in any comments. The board shall then determine whether to accept, reject, or modify the recommended order. The board may remand part or all of the matter to the presiding officer or may itself act as presiding officers for further proceedings.

(d) The board may modify this procedure with notice to all parties.

(2) Final Orders. The board shall issue a final order which

shall include the information required by 63-46b-10 or 63-46b-5(1)(i).

**R307-103-10. Stays of Orders.**

(1) Stay of Orders Pending Administrative Adjudication.

(a) A party seeking a stay of a challenged order during an adjudicative proceeding shall file a motion with the board. If granted, a stay would suspend the challenged order for the period as directed by the board.

(b) The board may order a stay of the order if the party seeking the stay demonstrates the following:

(i) The party seeking the stay will suffer irreparable harm unless the stay is issued;

(ii) The threatened injury to the party seeking the stay outweighs whatever damage the proposed stay is likely to cause the party restrained or enjoined;

(iii) The stay, if issued, would not be adverse to the public interest; and

(iv) There is substantial likelihood that the party seeking the stay will prevail on the merits of the underlying claim, or the case presents serious issues on the merits which should be the subject of further adjudication.

(2) Stay of the Order Pending Judicial Review.

(a) A party seeking a stay of the board's final order during the pendency of judicial review shall file a motion with the board.

(b) The board as presiding officer may grant a stay of its order during the pendency of judicial review if the standards of R307-103-10(1)(b) are met.

**R307-103-11. Reconsideration.**

No agency review under 63-46b-12 is available. A party may request reconsideration of an order of the presiding officer as provided in 63-46b-13.

**R307-103-12. Disqualification of Board Members or Other Presiding Officers.**

(1) Disqualification of Board Members or Other Presiding Officers.

(a) A member of the board or other presiding officer shall disqualify himself from performing the functions of the presiding officer regarding any matter in which he, or his spouse, or a person within the third degree of relationship to either of them, or the spouse of such person:

(i) Is a party to the proceeding, or an officer, director, or trustee of a party;

(ii) Has acted as an attorney in the proceeding or served as an attorney for, or otherwise represented a party concerning the matter in controversy;

(iii) Knows that he has a financial interest, either individually or as a fiduciary, in the subject matter in controversy or in a party to the proceeding;

(iv) Knows that he has any other interest that could be substantially affected by the outcome of the proceeding; or

(v) Is likely to be a material witness in the proceeding.

(b) A member of the board or other presiding officer is also subject to disqualification under principles of due process and administrative law.

(c) These requirements are in addition to any requirements under the Utah Public Officers' and Employees' Ethics Act, Utah Code Ann. Section 67-16-1 et seq.

(2) **Motions for Disqualification.** A motion for disqualification shall be made first to the presiding officer. If the presiding officer is appointed, any determination of the presiding officer upon a motion for disqualification may be appealed to the board.

#### **R307-103-13. Declaratory Orders.**

(1) A request for a declaratory order may be filed in accordance with the provisions of 63-46b-21. The request shall be titled a petition for declaratory order and shall meet the requirements of 63-46b-3(3). The request shall also set out a proposed order.

(2) Requests for declaratory order, if set for adjudicative hearing, will be conducted using formal procedures unless converted to an informal proceeding under R307-103-4(2) above.

(3) The provisions of 63-46b-4 through 63-46b-13 apply to declaratory proceedings, as do the provisions of this Rule R307-103.

#### **R307-103-14. Miscellaneous.**

(1) **Modifying Requirements of Rules.** For good cause, the requirements of these rules may be modified by order of the presiding officer.

(2) **Extensions of Time.** Except as otherwise provided by statute, the presiding officer may approve extensions of any time limits established by this rule, and may extend time limits adopted in schedules established under R307-103-7(6). The presiding officer may also postpone hearings. The chair of the board may act as presiding officer for purposes of this paragraph.

(3) **Computation of Time.** Time shall be computed as provided in Rule 6(a) of the Utah Rules of Civil Procedure except that no additional time shall be allowed for service by mail.

(4) **Appearances and Representation.**

(a) An individual who is a participant to a proceeding, or an officer designated by a partnership, corporation, association, or governmental entity which is a participant to a proceeding, may represent his, her, or its interest in the proceeding.

(b) Any participant may be represented by legal counsel.

(5) **Other Forms of Address.** Nothing in these rules shall prevent any person from requesting an opportunity to address the board as a member of the public, rather than as a party. An opportunity to address the board shall be granted at the discretion of the board. Addressing the board in this manner does

not constitute a request for agency action under R307-103-3.

(6) Settlement. A settlement may be through an administrative order or through a proposed judicial consent decree, subject to the agreement of the settlers.

(7) Requests for Records. Requests for records and related assessments of fees for records under the Title 63, Chapter 2, Utah Government Record Access and Management Act, are not governed by ~~Title 63, Chapter 46b, Utah Administrative Procedures Act,~~ or by this rule.

KEY: air pollution, administrative procedure, hearings\*  
April 12, 2001

63-46b



R307-110



State of Utah

| FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF CONTINUATION   |  |              |              |                    |
|---|--|--------------|--------------|--------------------|
| DAR file no:  |  | Date filed:  |              |                    |
| Utah Admin. R307-110  |  | Time filed:  |              |                    |
| Code ref. (R no.):  |  |              |              |                    |
| 1. Agency: Environmental Quality/Air Quality  |  |              |              |                    |
| Room no.:   |  |              |              |                    |
| Building:   |  |              |              |                    |
| Street address 1: 150 N 1950 W  |  |              |              |                    |
| Street address 2:   |  |              |              |                    |
| City,state,zip: SALT LAKE CITY, UT 84116-3085   |  |              |              |                    |
| Mailing address 1: PO BOX 144820  |  |              |              |                    |
| Mailing address 2:  |  |              |              |                    |
| City,state,zip: SALT LAKE CITY, UT 84114-4820   |  |              |              |                    |
| Contact person(s):  |  |              |              |                    |
| Name:   |  | Phone:       | Fax:         | E-mail: Remove:    |
| Jan Miller  |  | 801-536-4042 | 801-536-4099 | janmiller@utah.gov |
| (Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)   |  |              |              |                    |
| 2. Title of rule or section (catchline):  |  |              |              |                    |
| General Requirements: State Implementation Plan.  |  |              |              |                    |
| 3. A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:   |  |              |              |                    |
| R307-110 has 35 sections, each of which incorporates by reference one section or part of Utah's State Implementation Plan (SIP), which is required by Section 110 of the federal Clean Air Act (42 U.S.C. 7401). Most parts of the SIP review available data concerning emissions of air pollutants and how they interact with meteorology and topology to create air pollution that is harmful to human health; they also include appropriate control measures to ensure that pollution levels remain within limits that protect human health. 19-2-104(3)(e) authorizes the Air Quality Board to "prepare and develop a comprehensive plan or plans for the prevention, abatement, and control of air pollution in this state." 19-2-104(1)(a) authorizes the Air Quality Board to make rules "regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source." These two provisions enable the Air Quality Board to prepare plans and to incorporate them into state rules to make them enforceable. |  |              |              |                    |
| 4. A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:   |  |              |              |                    |
| See attached email file.  |  |              |              |                    |
| 5. A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:   |  |              |              |                    |
| The rule must be continued to meet federal requirements that the State adopt enforceable plans to reduce air pollution. If the State failed to adopt such plans and incorporate them by reference into Utah's rules, EPA would impose federal plans and rules instead. Responses  |  |              |              |                    |

|   |  |
|---|--|
|   | to all comments are included in #4 above.  |
| 6.  | <b>Indexing information – keywords (maximum of four, in lower case):</b><br>air pollution, PM10, PM2.5, ozone                    |
| 7.  | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>No document is associated with this filing. |
| <b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date. |  |

### AGENCY AUTHORIZATION

|  |   |                               |          |
|--|---|-------------------------------|----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date<br/>(mm/dd/yyyy):</b> | 8/5/2005 |
|--|---|-------------------------------|----------|

**R307. Environmental Quality, Air Quality.**

**R307-110. General Requirements: State Implementation Plan.**

**R307-110-1. Incorporation by Reference.**

To meet requirements of the Federal Clean Air Act, the Utah State Implementation Plan must be incorporated by reference into these rules. Copies of the Utah State Implementation Plan are available at the Utah Department of Environmental Quality, Division of Air Quality.

**R307-110-2. Section I, Legal Authority.**

The Utah State Implementation Plan, Section I, Legal Authority, as most recently amended by the Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-3. Section II, Review of New and Modified Air Pollution Sources.**

The Utah State Implementation Plan, Section II, Review of New and Modified Air Pollution Sources, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-4. Section III, Source Surveillance.**

The Utah State Implementation Plan, Section III, Source Surveillance, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-5. Section IV, Ambient Air Monitoring Program.**

The Utah State Implementation Plan, Section IV, Ambient Air Monitoring Program, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-6. Section V, Resources.**

The Utah State Implementation Plan, Section V, Resources, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-7. Section VI, Intergovernmental Cooperation.**

The Utah State Implementation Plan, Section VI, Intergovernmental Cooperation, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section

19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-8. Section VII, Prevention of Air Pollution Emergency Episodes.**

The Utah State Implementation Plan, Section VII, Prevention of Air Pollution Emergency Episodes, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-9. Section VIII, Prevention of Significant Deterioration.**

The Utah State Implementation Plan, Section VIII, Prevention of Significant Deterioration, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-10. Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part A, Fine Particulate Matter, as most recently amended by the Utah Air Quality Board on July 6, 2005, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-11. Section IX, Control Measures for Area and Point Sources, Part B, Sulfur Dioxide.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part B, Sulfur Dioxide, as most recently amended by the Utah Air Quality Board on January 5, 2005, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-12. Section IX, Control Measures for Area and Point Sources, Part C, Carbon Monoxide.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part C, Carbon Monoxide, as most recently amended by the Utah Air Quality Board on November 3, 2004, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-13. Section IX, Control Measures for Area and Point Sources, Part D, Ozone.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part D, Ozone, as most

recently amended by the Utah Air Quality Board on September 9, 1998, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-14. Section IX, Control Measures for Area and Point Sources, Part E, Nitrogen Dioxide.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part E, Nitrogen Dioxide, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-15. Section IX, Control Measures for Area and Point Sources, Part F, Lead.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part F, Lead, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-16. (Reserved.)**

Reserved.

**R307-110-17. Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits.**

The Utah State Implementation Plan, Section IX, Control Measures for Area and Point Sources, Part H, Emissions Limits, as most recently amended by the Utah Air Quality Board on July 6, 2005, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-18. Reserved.**

Reserved.

**R307-110-19. Section XI, Other Control Measures for Mobile Sources.**

The Utah State Implementation Plan, Section XI, Other Control Measures for Mobile Sources, as most recently amended by the Utah Air Quality Board on February 9, 2000, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-20. Section XII, Involvement.**

The Utah State Implementation Plan, Section XII, Involvement, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-21. Section XIII, Analysis of Plan Impact.**

The Utah State Implementation Plan, Section XIII, Analysis of Plan Impact, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-22. Section XIV, Comprehensive Emission Inventory.**

The Utah State Implementation Plan, Section XIV, Comprehensive Emission Inventory, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-23. Section XV, Utah Code Title 19, Chapter 2, Air Conservation Act.**

Section XV of the Utah State Implementation Plan contains Utah Code Title 19, Chapter 2, Air Conservation Act.

**R307-110-24. Section XVI, Public Notification.**

The Utah State Implementation Plan, Section XVI, Public Notification, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-25. Section XVII, Visibility Protection.**

The Utah State Implementation Plan, Section XVII, Visibility Protection, as most recently amended by the Utah Air Quality Board on March 26, 1993, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-26. R307-110-26 Section XVIII, Demonstration of GEP Stack Height.**

The Utah State Implementation Plan, Section XVIII, Demonstration of GEP Stack Height, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-27. Section XIX, Small Business Assistance Program.**

The Utah State Implementation Plan, Section XIX, Small Business Assistance Program, as most recently amended by the Utah Air Quality Board on December 18, 1992, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-28. Regional Haze.**

The Utah State Implementation Plan, Section XX, Regional Haze, as most recently amended by the Utah Air Quality Board on May 5, 2004, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-29. Section XXI, Diesel Inspection and Maintenance Program.**

The Utah State Implementation Plan, Section XXI, Diesel Inspection and Maintenance Program, as most recently amended by the Utah Air Quality Board on July 12, 1995, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-30. Section XXII, General Conformity.**

The Utah State Implementation Plan, Section XXII, General Conformity, as adopted by the Utah Air Quality Board on October 4, 1995, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-31. Section X, Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability.**

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part A, General Requirements and Applicability, as most recently amended by the Utah Air Quality Board on March 31, 2004, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-32. Section X, Vehicle Inspection and Maintenance Program, Part B, Davis County.**

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part B, Davis County, as most recently amended by the Utah Air Quality Board on February 5, 1997, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-33. Section X, Vehicle Inspection and Maintenance Program, Part C, Salt Lake County.**

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part C, Salt Lake County, as most recently amended by the Utah Air Quality Board on October 6, 2004, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-34. Section X, Vehicle Inspection and Maintenance Program, Part D, Utah County.**

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part D, Utah County, as most

recently amended by the Utah Air Quality Board on March 31, 2004, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**R307-110-35. Section X, Vehicle Inspection and Maintenance Program, Part E, Weber County.**

The Utah State Implementation Plan, Section X, Vehicle Inspection and Maintenance Program, Part E, Weber County, as most recently amended by the Utah Air Quality Board on November 3, 2004, pursuant to Section 19-2-104, is hereby incorporated by reference and made a part of these rules.

**KEY: air pollution, PM10, PM2.5, ozone**  
**September 2, 2005**  
**Notice of Continuation March 27, 2002**  
**19-2-104(3)(e)**





2 sided

R307-165

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

|  |  |              |                   |                |               |             |                |                |               |              |              |                   |  |
|--|--|--------------|-------------------|----------------|---------------|-------------|----------------|----------------|---------------|--------------|--------------|-------------------|--|
| DAR file no:   |  | Date filed:  |                   |                |               |             |                |                |               |              |              |                   |  |
| Utah Admin. R307-165   |  | Time filed:  |                   |                |               |             |                |                |               |              |              |                   |  |
| Code ref. (R no.):   |  |              |                   |                |               |             |                |                |               |              |              |                   |  |
| 1. Agency: Environmental Quality/Air Quality<br>Room no.:<br>Building:<br>Street address 1: 150 N 1950 W<br>Street address 2:<br>City,state,zip: SALT LAKE CITY, UT 84116-3085<br>Mailing address 1: PO BOX 144820<br>Mailing address 2:<br>City,state,zip: SALT LAKE CITY, UT 84114-4820<br>Contact person(s):<br><table border="0"> <tr> <td><b>Name:</b></td> <td><b>Phone:</b></td> <td><b>Fax:</b></td> <td><b>E-mail:</b></td> <td><b>Remove:</b></td> </tr> <tr> <td>Mat E Carlile</td> <td>801-536-4136</td> <td>801-536-0085</td> <td>MCARLILE@utah.gov</td> <td></td> </tr> </table> |  |              |                   | <b>Name:</b>   | <b>Phone:</b> | <b>Fax:</b> | <b>E-mail:</b> | <b>Remove:</b> | Mat E Carlile | 801-536-4136 | 801-536-0085 | MCARLILE@utah.gov |  |
| <b>Name:</b>   | <b>Phone:</b>  | <b>Fax:</b>  | <b>E-mail:</b>    | <b>Remove:</b> |               |             |                |                |               |              |              |                   |  |
| Mat E Carlile  | 801-536-4136   | 801-536-0085 | MCARLILE@utah.gov |                |               |             |                |                |               |              |              |                   |  |
| <small>(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)</small>   |  |              |                   |                |               |             |                |                |               |              |              |                   |  |
| 2.   | <b>Title of rule or section (catchline):</b><br>Emission Testing   |              |                   |                |               |             |                |                |               |              |              |                   |  |
| 3.   | <b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b><br>Subsection 19-2-104(1)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources..." One component of preventing air pollution is testing to ensure that control equipment is working properly.  |              |                   |                |               |             |                |                |               |              |              |                   |  |
| 4.   | <b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b><br>R307-165 was last reviewed on June 11, 2003. R307-165 has been revised once since the last review: DAR 27756, published April 1, 2005, and effective on September 2, 2005. DAQ received one written comment since the last review. COMMENT: EPA is concerned with the effectiveness of the rule. RESPONSE: The requirement to do a stack test at least once every 5 years in R307-165 is a general requirement that applies to all stacks with an established emission limitation. The 5-year schedule is adequate to meet the requirement in Utah's operating permit program to show compliance with all emission limitations because at least one test is required during the 5-year permit term. The requirement in R307-165 provides a testing requirement for those emission units that do not have a testing schedule established in their Approval Order (AO) or in applicable requirements such as NSPS limits. The testing schedule for most emission units is established either in an AO, or in the SIP. In many cases, stack testing is required more frequently (1 year or 3 year schedule) or a continuous emissions monitor (CEM) is required. DAQ staff determine the frequency on a case-by-case basis after considering the size of the emission unit, the need to verify the effectiveness of pollution controls, and the location of the source. For example, emissions from a natural gas turbine do not vary significantly over time and post process emission controls are not used. In this case, a stack test every 5-years will provide a periodic check, |              |                   |                |               |             |                |                |               |              |              |                   |  |

|  |   |
|--|---|
|  | <p>but emissions are not expected to change significantly over time. DAQ staff recommended removing the requirement to do an initial stack test within 6 months because the AO for the source is the more appropriate place to establish this requirement. For example, in the past, DAQ established emission limits in AO's with a requirement to test the emission unit if directed by the Executive Secretary. The idea was that these units would be tested if inspectors had reason to believe that they were not operating as described in the NOI, but otherwise there was little value in doing regular stack tests. DAQ's current practice is to establish emission limits only for those sources where on-going testing is important. DAQ still has general authority to require testing or to require more information from the source if needed. Therefore, DAQ believes that the initial testing requirements in R307-165 do not conflict with the requirements developed in a case-by-case review of emission units. Because EPA believes that it is important to establish a general, underlying requirement, DAQ staff agree that the requirement to do a stack test within 6 months of start-up should be retained. EPA also expressed concerns about the provision in R307-165 that allows the Board to grant exceptions to the mandatory testing requirements of R307-165-2 that are consistent with the purposes of R307. DAQ disagrees with EPA's contention that no discretion can be allowed in the process. There are circumstances that will prevent a stack test from being completed on schedule, such as equipment breakdowns, or if the facility is not producing the right product mix to get a meaningful result from the test. In some cases, a source may need time to develop the testing protocol for an innovative process. The rule requires that "any exception must be consistent with the purposes of R307" and this requirement prevents the exception process from being used just for the convenience of the source.</p> |
| 5.   | <p><b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br/>Without periodic testing, there is no guarantee that pollution control equipment is working properly. This rule outlines the testing and should be continued.</p>  |
| 6.   | <p><b>Indexing information – keywords (maximum of four, in lower case):</b><br/>air pollution, emission testing</p>   |
| 7.   | <p><b>Attach an RTF document containing the text of this rule change (filename):</b><br/>There is currently a document associated with this filing.</p>   |
| <p><b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.</p> |   |

### AGENCY AUTHORIZATION

|   |   |  |
|---|---|--|
| <p><b>Agency head or designee, and title:</b></p> | <p>M. Cheryl Heying<br/>Planning Branch Manager</p> | <p><b>Date</b><br/>(mm/dd/yyyy): 8/10/2005</p> |
|---|---|--|

**R307. Environmental Quality, Air Quality.**

**R307-165. Emission Testing.**

**R307-165-1. Purpose.**

R307-165 establishes the frequency of emission testing requirements for all areas in the state.

**R307-165-2. Testing Every 5 Years.**

Emission testing is required at least once every five years of all sources with established emission limitations specified in approval orders issued under R307-401 or in section IX, Part H of the Utah state implementation plan. In addition, if the executive secretary has reason to believe that an applicable emission limitation is being exceeded, the executive secretary may require the owner or operator to perform such emission testing as is necessary to determine actual compliance status. Sources approved in accordance with R307-401 will be tested within six months of start-up. The Board may grant exceptions to the mandatory testing requirements of R307-165-2 that are consistent with the purposes of R307.

**R307-165-3. Notification of DAQ.**

At least 30 days prior to conducting any emission testing required under any part of R307, the owner or operator shall notify the executive secretary of the date, time and place of such testing and, if determined necessary by the executive secretary, the owner or operator shall attend a pretest conference.

**R307-165-4. Test Conditions.**

All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated. During the tests, the source shall burn fuels or combinations of fuels, use raw materials, and maintain process conditions representative of normal operations. In addition, the source shall operate under such other relevant conditions as the executive secretary shall specify.

**R307-165-5. Rejection of Test Results.**

The executive secretary may reject emissions test data if they are determined to be incomplete, inadequate, not representative of operating conditions specified for the test, or if the executive secretary was not provided an opportunity to have an observer present at the test.

**KEY: air pollution, emission testing**

**2005**

**19-2-104(1)**



R307-201

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

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| DAR file no:   |   | Date filed:  |                   |                |               |             |                |                |                |              |              |                   |  |
| Utah Admin. R307-201   |   | Time filed:  |                   |                |               |             |                |                |                |              |              |                   |  |
| Code ref. (R no.):   |   |              |                   |                |               |             |                |                |                |              |              |                   |  |
| <p>1. Agency: Environmental Quality/Air Quality</p> <p>Room no.:</p> <p>Building:</p> <p>Street address 1: 150 N 1950 W</p> <p>Street address 2:</p> <p>City,state,zip: SALT LAKE CITY, UT 84116-3085</p> <p>Mailing address 1: PO BOX 144820</p> <p>Mailing address 2:</p> <p>City,state,zip: SALT LAKE CITY, UT 84114-4820</p> <p><b>Contact person(s):</b></p> <table border="0"> <tr> <td><b>Name:</b></td> <td><b>Phone:</b></td> <td><b>Fax:</b></td> <td><b>E-mail:</b></td> <td><b>Remove:</b></td> </tr> <tr> <td>Mat E. Carlile</td> <td>801-536-4136</td> <td>801-536-0085</td> <td>MCARLILE@utah.gov</td> <td></td> </tr> </table> <p><small>(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)</small></p> |   |              |                   | <b>Name:</b>   | <b>Phone:</b> | <b>Fax:</b> | <b>E-mail:</b> | <b>Remove:</b> | Mat E. Carlile | 801-536-4136 | 801-536-0085 | MCARLILE@utah.gov |  |
| <b>Name:</b>   | <b>Phone:</b>   | <b>Fax:</b>  | <b>E-mail:</b>    | <b>Remove:</b> |               |             |                |                |                |              |              |                   |  |
| Mat E. Carlile   | 801-536-4136  | 801-536-0085 | MCARLILE@utah.gov |                |               |             |                |                |                |              |              |                   |  |
| 2.   | <p><b>Title of rule or section (catchline):</b></p> <p>Emission Standards: General Emission Standards</p>   |              |                   |                |               |             |                |                |                |              |              |                   |  |
| 3.   | <p><b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b></p> <p>Subsection 19-2-104(1)(b) allows the Air Quality Board to make rules "establishing air quality standards." Standards are needed to ensure that emissions of air pollution do not harm public health.</p>  |              |                   |                |               |             |                |                |                |              |              |                   |  |
| 4.   | <p><b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b></p> <p>R307-201 was last reviewed on June 11, 2003. R307-201 has been revised once since the last review: DAR 27757, published April 1, 2005, and effective on September 2, 2005. DAQ received five written comments since the last review. COMMENT ONE: EPA disagrees with DAQ's interpretation of excess emissions during startup, shutdown, and malfunction, and stated that these provisions should be removed from this rule and addressed in a separate excess emissions rule. RESPONSE: DAQ has re-proposed a draft of the Excess Emissions rule and submitted it to the EPA on March 3, 2005. DAQ is committed to continue this rulemaking process. COMMENT TWO: KUCC has an objection concerning the use of a modified form of Method 9. In summary, any modified form of Method 9 used as an enforcement standard for intermittent or mobile sources, as opposed to a trigger for further action, is not a verifiable method, is not an approved method, and imposes a standard more restrictive than corresponding federal regulations and, according to Utah Code 19-2-106, cannot be maintained without a written finding after public comment and hearing and based on evidence in the record, that corresponding federal regulations are not adequate to protect public health and the environment of the state. For the reasons given regarding opacity observations for Intermittent and mobile sources the following items should be deleted: the second sentence of proposed R307-201-3(9), the</p> |              |                   |                |               |             |                |                |                |              |              |                   |  |



second sentence of R307-206-5(1), the second sentence of proposed R307-306-5(1), the third sentence of R307-309-4, and the second sentence of proposed R307-309-5(3).  
**RESPONSE:** The provision of R307-201 governing the method to enforce opacity observers for mobile and intermittent sources has been in effect for over 25 years. DAQ added this provision to the other rules to clarify that the provision of R307-201 would continue to apply, because DAQ separated its rules into two categories, State only rules and rules that will apply in only nonattainment and maintenance areas. DAQ staff recommends not deleting these provisions from the rules. DAQ's Compliance staff have indicated that these provisions are needed. It is necessary to have a method to enforce opacity limits for mobile and intermittent sources and EPA Method 9 is not intended to measure opacity limits for mobile and intermittent sources. Utah Code 19-2-106 restricts DAQ from developing a standard more restrictive than the corresponding federal regulation; however, there is no corresponding federal regulation for measuring opacity emissions limits for mobile and intermittent sources. Therefore, DAQ developed a method to measure compliance of opacity emission limits for mobile and intermittent sources consistent with EPA Method 9.  
**COMMENT THREE:** Add a provision to R307-201, 206, 207, 302, 305, 306, 309, and other rules with visible opacity emission limits to allow alternatives to EPA Method 9 (40 CFR Part 60, Appendix A). Any alternative would be approved by the Executive Secretary on a case-by-case basis. One such alternative could be the Digital Opacity Compliance System (DOCS). Requirement for such a system could be included in Approval Orders and/or Title V permits.  
**RESPONSE:** DAQ agrees that DOCS can be beneficial; and will continue to allow DOCS as an option for periodic monitoring through operating permits. DAQ will reconsider adding such a provisions to its rules, if DOCS receive federal approval.  
**COMMENT FOUR:** R307-201-3(7) says "Visible emissions...shall not be deemed in violation provided..." This use of the term violation is problematic. Some alternate language should be sought that avoids the controversy among different interpretations of the word violation.  
**RESPONSE:** This comment has reference to the Excess Emissions issue, and as mentioned above, DAQ has re-proposed a draft of the Excess Emissions rule and submitted it to the EPA on March 3, 2005. DAQ is committed to continue this process.  
**COMMENT FIVE:** EPA stated that opacity standards for diesel engines must exempt locomotives, because states are preempted (or not allowed) to set opacity standards for locomotive engines. EPA suggested the following language for these provisions: "Emissions from diesel engines, except locomotives, manufactured..."  
**RESPONSE:** DAQ will make the suggested revision in R307-201-2(5) to read as follows: "Emissions from diesel engines, except locomotives, manufactured after January 1, 1973, shall be of a shade or density no darker than 20% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding three minutes in any hour."

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|----|--|
| 5. | <b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br>Standards are needed to ensure that emissions of air pollution do not harm public health. This rule outlines the standards and should be continued. |
| 6. | <b>Indexing information – keywords (maximum of four, in lower case):</b><br>air pollution, PM10  |
| 7. | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing.  |

**To the agency:** Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.

**AGENCY AUTHORIZATION**

|  |  |                               |           |
|--|--|-------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manger | <b>Date<br/>(mm/dd/yyyy):</b> | 8/10/2005 |
|--|--|-------------------------------|-----------|

**R307. Environmental Quality, Air Quality.**

**R307-201. Emission Standards: General Emission Standards.**

**R307-201-1. Purpose.**

R307-201 establishes emission standards for all areas of the state except for sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

**R307-201-2. Applicability.**

R307-201 applies statewide to any sources of emissions except for sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

**R307-201-3. Visible Emissions Standards.**

(1) Visible emissions from installations constructed on or before April 25, 1971, except diesel engines, shall be of a shade or density no darker than 40% opacity, except as otherwise provided in these rules.

(2) Visible emissions from installations constructed after April 25, 1971, except diesel engines shall be of a shade or density no darker than 20% opacity, except as otherwise provided in these rules.

(3) Visible emissions for all incinerators, no matter when constructed, shall be of shade or density no darker than 20% opacity.

(4) No owner or operator of a gasoline powered engine or vehicle shall allow, cause or permit visible emissions.

(5) Emissions from diesel engines, except locomotives, manufactured after January 1, 1973, shall be of a shade or density no darker than 20% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding three minutes in any hour.

(6) Emissions from diesel engines manufactured before January 1, 1973, shall be of a shade or density no darker than 40% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding three minutes in any hour.

(7) Visible emissions exceeding the opacity standards for short time periods as the result of initial warm-up, soot blowing, cleaning of grates, building of boiler fires, cooling, etc., caused by start-up or shutdown of a facility, installation or operation, or unavoidable combustion irregularities which do not exceed three minutes in length (unavoidable combustion irregularities which exceed three minutes in length must be handled in accordance with R307-107), shall not be deemed in violation provided that the executive secretary finds that

adequate control technology has been applied. The owner or operator shall minimize visible and non-visible emissions during start-up or shutdown of a facility, installation, or operation through the use of adequate control technology and proper procedures.

(8) Compliance Method. Emissions shall be brought into compliance with these requirements by reduction of the total weight of contaminants discharged per unit of time rather than by dilution of emissions with clean air.

(9) Opacity Observation. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. Opacity observers of mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a 6-minute period shall not apply.

#### **R307-201-4. Automobile Emission Control Devices.**

Any person owning or operating any motor vehicle or motor vehicle engine registered or principally operated in the State of Utah on which is installed or incorporated a system or device for the control of crankcase emissions or exhaust emissions in compliance with the Federal motor vehicle rules, shall maintain the system or device in operable condition and shall use it at all times that the motor vehicle or motor vehicle engine is operated. No person shall remove or make inoperable the system or device or any part thereof, except for the purpose of installing another system or device, or part thereof, which is equally or more effective in reducing emissions from the vehicle to the atmosphere.

**KEY: air pollution, PM10**

**2005**

**19-2-101**

**19-2-104**

R307-205

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

DAR file no:

Utah Admin. R307-205

Code ref. (R no.):

Date filed:

Time filed:

1. Agency: Environmental Quality/Air Quality  
Room no.:  
Building:  
Street address 1: 150 N 1950 W  
Street address 2:  
City,state,zip: SALT LAKE CITY, UT 84116-3085  
Mailing address 1: PO BOX 144820  
Mailing address 2:  
City,state,zip: SALT LAKE CITY, UT 84114-4820

**Contact person(s):**

Name:

Phone:

Fax:

E-mail:

Remove:

Mat E. Carlile

801-536-4136

801-536-0085

MCARLILE@utah.gov

(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)

**2. Title of rule or section (catchline):**

Emission Standards: Fugitive Emissions and Fugitive Dust

**3. A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:**

The Air Quality board is required by 19-2-101(2) to "...achieve and maintain levels of air quality which will protect human health and safety,..." In addition, 19-2-104(1)(a) allows the Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source..." Also, 19-2-109(2)(a) allows the Board to "...establish emission control requirements by rule that in its judgment may be necessary to prevent, abate, or control air pollution that may be statewide or may vary from area to area, taking into account varying local conditions." Finally, 19-2-104(3)(e) allows the Board to "...prepare and develop a comprehensive plan or plans for the prevention, abatement, and control of air pollution in this state." R307-205 protects the public health by reducing emissions from industries, gravel pits, constructions sites, haul trucks, mines, and tailings ponds, as authorized by the above statutes.

**4. A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:**

R307-205 was last reviewed on August 2, 2000. R307-205 has been revised once since the last review: DAR 27764, published April 1, 2005, and effective on July 7, 2005. DAQ received three written comments since the last review. COMMENT ONE: The revised rules exempt sources constructed before certain dates; in R307-201-3, the date is April 21, 1975. The original idea behind grandfathering was that eventually this equipment would be replaced by newer equipment with better controls. RESPONSE: Sources are required to undergo a New Source Review, and lose grandfathered status, when they modify their operations. A source is no longer grandfathered if it moves to another location, and does

not regain grandfathered status if it returns to the original location. A grandfathered source must meet specific emission limits required in a SIP or maintenance plan. Any equipment brought into Utah from another state is not grandfathered at the new location in Utah, and is subject to New Source Review rules. Generally, our New Source Review is more stringent than New Source Performance Standards. COMMENT TWO: R307-205 "General emission: Fugitive Emissions and Fugitive Dust" - EPA is concerned with the removal of provisions of R307-205 and has asked UDAQ to show that these changes will not interfere with attainment, maintenance, or other requirements of CAA. RESPONSE: The provisions removed from R307-205 fall into three categories: 1. DAQ moved the definition of "Road" to the general definitions in R307-101-2 rather than repeating the definition in multiple rules. 2. Provisions that apply to nonattainment and maintenance areas are addressed in R307-309, and do not need to be included in this rule that applies only in attainment areas for PM. Some outdated requirements to submit a fugitive dust plan by 1981 were also removed because those plans were submitted, as required, almost 25 years ago. 3. The only remaining provision that was removed requires an NOI for any new unpaved road with a traffic volume of 150 trips per day. This rule has been in place for a long time, and discussions with DAQ staff indicate that application of the rule focused on industrial roads such as haul roads. Since this rule was first put in place, DAQ has increased fugitive dust requirements and the regulation of haul roads through the approval order process for new or modified sources. This has been done under the authority of R307-401, not this rule. Removing the unpaved road provision in this rule will not have any affect on air quality because the regulation of fugitive dust from haul roads has essentially been taken over by the approval order process. COMMENT THREE: A letter from the U.S. Environmental Protection Agency, was received on May 15, 2003. This letter was in response to Utah's submittal to EPA for approval of changes made during 1999 in R307-205 and R307-309. The two rules address similar issues, but R307-205 applies statewide, while R307-309 adds further requirements for the urban areas that are designated nonattainment for the federal health standard for coarse particles. Most of EPA's letter addresses interactions of R307-309 and other rules; EPA's only comment about R307-205 was: "We also realize that the new requirements of R307-205 and R307-309 overall are more stringent than what was contained in R307-12 [the rule that preceded R307-205 and R307-309], and recognize the efforts of the State in revising this rule." Therefore, no action is needed in response to this comment.

5. **A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:**  
R307-205 reduces emissions from industries, gravel pits, constructions sites, haul trucks, mines, and tailings ponds. In addition, complaints about fugitive dust make up approximately 50% of the complaints received by the Division of Air Quality. Therefore, this rule should be continued.

6. **Indexing information - keywords (maximum of four, in lower case):**  
air pollution, fugitive emissions, mining, tailings

7. **Attach an RTF document containing the text of this rule change (filename):**  
There is currently a document associated with this filing.

**To the agency:** Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.

**AGENCY AUTHORIZATION**

|  |   |                              |           |
|--|---|------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date</b><br>(mm/dd/yyyy): | 8/10/2005 |
|--|---|------------------------------|-----------|



**R307. Environmental Quality, Air Quality.**

**R307-205. Emission Standards: Fugitive Emissions and Fugitive Dust.**

**R307-205-1. Applicability.**

(1) Except where otherwise specified, R307-205 applies statewide.

(2) The provisions of R307-205 shall not apply to any sources for which limitations for fugitive dust or fugitive emissions are assigned pursuant to R307-401, R307-305, or R307-307 nor shall they apply to agricultural or horticultural activities.

(3) The following definitions apply throughout R307-205:

"Material" means sand, gravel, soil, minerals or other matter which may create fugitive dust.

"Road" means any public or private road.

**R307-205-2. Fugitive Emissions.**

Fugitive emissions from sources in areas outside Davis, Salt Lake and Utah Counties, Ogden City and any nonattainment area for PM10 and which were constructed before April 25, 1971, shall not exceed 40% opacity. Fugitive emissions from sources constructed after April 25, 1971, shall not exceed 20% opacity.

**R307-205-3. Fugitive Dust.**

(1) Storage and Handling of Aggregate Materials. Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall minimize fugitive dust from such an operation. Such control may include the use of enclosures, covers, stabilization or other equivalent methods or techniques as approved by the executive secretary.

(2) Construction and Demolition Activities.

(a) Any person engaging in clearing or leveling of land greater than one-quarter acre in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land greater than one-quarter acre in size or access haul roads shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization of potential fugitive dust sources or other equivalent methods or techniques approved by the executive secretary.

(b) The owner or operator of any land area greater than one-quarter acre in size that has been cleared or excavated shall take measures to prevent fugitive particulate matter from becoming airborne. Such measures may include:

- (i) planting vegetative cover,
- (ii) providing synthetic cover,
- (iii) watering,
- (iv) chemical stabilization,

(v) wind breaks, or  
(vi) other equivalent methods or techniques approved by the executive secretary.

(c) Any person engaging in demolition activities including razing homes, buildings, or other structures or removing paving material from roads or parking areas shall take steps to minimize fugitive dust from such activities. Such control may include watering and chemical stabilization or other equivalent methods or techniques approved by the executive secretary.

#### **R307-205-4. Roads.**

(1) Any person planning to construct or operate a new unpaved road which is anticipated to have an average daily traffic volume of 150 vehicle trips per day or greater, averaged over a consecutive five day period, shall submit a notice of intent to construct or operate such a road to the executive secretary pursuant to R307-401. Such notice shall include proposed action to minimize fugitive dust emissions from the road.

(2) The executive secretary may require persons owning, operating or maintaining any new or existing road, or having right-of-way easement or possessory right to use the same to supply traffic count information as determined necessary to ascertain whether or not control techniques are adequate or additional controls are necessary.

(3) Any person who deposits materials which may create fugitive dust on a public or private paved road shall clean the road promptly.

#### **R307-205-5. Mining Activities.**

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-205-5 and not by R307-205-3 and 4.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used may include:

- (a) periodic watering of unpaved roads,
- (b) chemical stabilization of unpaved roads,
- (c) paving of roads,
- (d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,
- (e) restricting the speed of vehicles in and around the mining operation,
- (f) revegetating, mulching, or otherwise stabilizing the

surface of all areas adjoining roads that are a source of fugitive dust,

(g) restricting the travel of vehicles on other than established roads,

(h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,

(i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,

(j) minimizing the area of disturbed land,

(k) prompt revegetation of regraded lands,

(l) planting of special windbreak vegetation at critical points in the permit area,

(m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the executive secretary.

(n) restricting the areas to be blasted at any one time,

(o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,

(p) restricting fugitive dust at spoil and coal transfer and loading points,

(q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or

(r) other techniques as determined necessary by the executive secretary.

(4) Any person owning or operating an existing mining operation in an actual area of nonattainment for particulate or an existing mining operation outside an actual area of nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the executive secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.

#### **R307-205-6. Tailings Piles and Ponds.**

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-205-6 and not by R307-205-3 and 4.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:

- (a) watering,
- (b) chemical stabilization,
- (c) synthetic covers,
- (d) vegetative covers,
- (e) wind breaks,
- (f) minimizing the area of disturbed tailings,
- (g) restricting the speed of vehicles in and around the tailings operation, or
- (h) other equivalent methods or techniques which may be approvable by the executive secretary.

(3) Any person owning or operating an existing tailings operation in a nonattainment area for particulate or an existing mining operation outside an actual area of nonattainment from which fugitive dust impacts an actual area of nonattainment for particulate shall submit plans for control of fugitive dust from such operations to the executive secretary for approval no later than September 29, 1981, 180 days after the effective date of this regulation.

**KEY: air pollution, fugitive emissions\*, mining\*, tailings\* 1999**

**Notice of Continuation August 2, 2000**

**19-2-101**

**19-2-104**

**19-2-109**

R307-206

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

|   |   |              |  |                |                |                |                |             |              |  |  |
|---|---|--------------|--|----------------|----------------|----------------|----------------|-------------|--------------|--|--|
| DAR file no:<br>Utah Admin.      R307-206<br>Code ref. (R no.):   | Date filed:<br>Time filed:  |              |  |                |                |                |                |             |              |  |  |
| 1. Agency:                      Environmental Quality/Air Quality<br>Room no.:<br>Building:<br>Street address 1:      150 N 1950 W<br>Street address 2:<br>City, state, zip:      SALT LAKE CITY, UT    84116-3085<br>Mailing address 1:    PO BOX 144820<br>Mailing address 2:<br>City, state, zip:      SALT LAKE CITY, UT    84114-4820<br><b>Contact person(s):</b><br><table style="width: 100%; border: none;"> <tr> <td style="width: 25%;"><b>Name:</b></td> <td style="width: 25%;"><b>Phone:</b></td> <td style="width: 25%;"><b>Fax:</b></td> <td style="width: 25%;"><b>E-mail:</b></td> <td style="width: 20%;"><b>Remove:</b></td> </tr> <tr> <td>Mat E. Carlile</td> <td>81-536-4136</td> <td>801-536-0085</td> <td><a href="mailto:MCARLILE@utah.gov">MCARLILE@utah.gov</a></td> <td></td> </tr> </table> |   | <b>Name:</b> | <b>Phone:</b>  | <b>Fax:</b>    | <b>E-mail:</b> | <b>Remove:</b> | Mat E. Carlile | 81-536-4136 | 801-536-0085 | <a href="mailto:MCARLILE@utah.gov">MCARLILE@utah.gov</a> |  |
| <b>Name:</b>  | <b>Phone:</b>   | <b>Fax:</b>  | <b>E-mail:</b>   | <b>Remove:</b> |                |                |                |             |              |  |  |
| Mat E. Carlile  | 81-536-4136   | 801-536-0085 | <a href="mailto:MCARLILE@utah.gov">MCARLILE@utah.gov</a> |                |                |                |                |             |              |  |  |
| <small>(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)</small>  |   |              |  |                |                |                |                |             |              |  |  |
| 2.  | <b>Title of rule or section (catchline):</b><br>Emission Standards: Abrasive Blasting   |              |  |                |                |                |                |             |              |  |  |
| 3.  | <b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b><br>Rule R307-206 sets forth performance standards and maximum concentration of contaminants allowed in the air for operations that clean or prepare a surface by forcefully propelling a stream of abrasive material against the surface. Subsection 19-2-104(1)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source."   |              |  |                |                |                |                |             |              |  |  |
| 4.  | <b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b><br>R307-206 was last reviewed on June 19, 2003. R307-206 has been revised once since the last review: DAR 27759, published April 1, 2005, and effective on July 7, 2005. DAQ received one written comment. COMMENT: KUCC has an objection concerning the use of a modified form of Method 9. In summary, any modified form of Method 9 used as an enforcement standard for intermittent or mobile sources, as opposed to a trigger for further action, is not a verifiable method, is not an approved method, and imposes a standard more restrictive than corresponding federal regulations and, according to Utah Code 19-2-106, cannot be maintained without a written finding after public comment and hearing and based on evidence in the record, that corresponding federal regulations are not adequate to protect public health and the environment of the state. For the reasons given regarding opacity observations for Intermittent and mobile sources, the following items should be deleted: the second sentence of proposed R307-201-3(9), the second sentence of R307-206-5(1), the second sentence of proposed R307-306-5(1), the third sentence of R307-309-4, and the second sentence of proposed |              |  |                |                |                |                |             |              |  |  |

|   |  |
|---|--|
|   | R307-309-5(3). RESPONSE: The provision of R307-201 governing the method to enforce opacity observers for mobile and intermittent sources has been in effect for over 25 years. DAQ added this provision to the other rules to clarify that this provision of R307-201 would continue to apply, because DAQ separated its rules into two categories, State only rules and rules that will apply in only nonattainment and maintenance areas. DAQ staff recommends not deleting these provisions from the rules. DAQ's Compliance staff have indicated that these provisions are needed. It is necessary to have a method to enforce opacity limits for mobile and intermittent sources and EPA Method 9 is not intended to measure opacity limits for mobile and intermittent sources. Utah Code 19-2-106 restricts DAQ from developing a standard more restrictive than the corresponding federal regulation; however, there is no corresponding federal regulation for measuring opacity emissions limits for mobile and intermittent sources. Therefore, DAQ developed a method to measure compliance of opacity emission limits for mobile and intermittent sources consistent with EPA Method 9. |
| 5.  | <b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br>This rule protects the health of citizens when abrasive blasting operations are underway and should be continued.   |
| 6.  | <b>Indexing information – keywords (maximum of four, in lower case):</b><br>air pollution, abrasive blasting, PM10   |
| 7.  | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing.  |
| <b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date. |  |

### AGENCY AUTHORIZATION

|  |   |                              |           |
|--|---|------------------------------|-----------|
| <b>Agency head or designee, and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date</b><br>(mm/dd/yyyy): | 8/10/2005 |
|--|---|------------------------------|-----------|

**R307. Environmental Quality, Air Quality.**

**R307-206. Emission Standards: Abrasive Blasting.**

**R307-206-1. Purpose.**

R307-206 establishes work practice and emission standards for abrasive blasting operations for sources located statewide except for those sources listed in section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

**R307-206-2. Definitions.**

(1) The following additional definitions apply to R307-206:

"Abrasive Blasting" means the operation of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

"Abrasive Blasting Equipment" means any equipment utilized in abrasive blasting operations.

"Confined Blasting" means any abrasive blasting conducted in an enclosure which significantly restricts air contaminants from being emitted to the ambient atmosphere, including but not limited to shrouds, tanks, drydocks, buildings and structures.

"Multiple Nozzles" means a group of two or more nozzles being used for abrasive cleaning of the same surface in such close proximity that their separate plumes are indistinguishable.

"Unconfined Blasting" means any abrasive blasting which is not confined blasting as defined above.

**R307-206-3. Applicability.**

R307-206 applies statewide to any abrasive blasting operation, except for any source that is listed in Section IX, Part H of the state implementation plan or that is located in a PM10 nonattainment or maintenance area.

**R307-206-4. Visible Emission Standards.**

Visible emissions from abrasive blasting operations shall not exceed 40% opacity, except for an aggregate period of three minutes in any one hour.

**R307-206-5. Visible Emission Evaluation Techniques.**

1) Visible emissions shall be measured using EPA Method 9. Visible emissions from intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15 second intervals over a six-minute period shall not apply.

(2) Visible emissions from unconfined blasting shall be measured at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle.



(3) An unconfined blasting operation that uses multiple nozzles shall be considered a single source unless it can be demonstrated by the owner or operator that each nozzle, measured separately, meets the emission and performance standards provided in R307-206-2 through 4.

(4) Visible emissions from confined blasting shall be measured at the densest point after the air contaminant leaves the enclosure.

**KEY: air pollution, abrasive blasting, PM10**

**July 7, 2005**

**19-2-104(1)(a)**

R307-302

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

|   |   |              |                          |         |         |         |                |             |              |                          |  |
|---|---|--------------|--------------------------|---------|---------|---------|----------------|-------------|--------------|--------------------------|--|
| DAR file no:<br>Utah Admin.      R307-302<br>Code ref. (R no.):   | Date filed:<br>Time filed:  |              |                          |         |         |         |                |             |              |                          |  |
| 1. Agency:                      Environmental Quality/Air Quality<br>Room no.:<br>Building:<br>Street address 1:      150 N 1950 W<br>Street address 2:<br>City,state,zip:          SALT LAKE CITY, UT   84116-3085<br>Mailing address 1:      PO BOX 144820<br>Mailing address 2:<br>City,state,zip:          SALT LAKE CITY, UT   84114-4820<br>Contact person(s):<br><table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Name:</td> <td style="width: 25%;">Phone:</td> <td style="width: 25%;">Fax:</td> <td style="width: 25%;">E-mail:</td> <td style="width: 20%;">Remove:</td> </tr> <tr> <td>Mat E. Carlile</td> <td>81-536-4136</td> <td>801-536-0085</td> <td><u>MCARLILE@utah.gov</u></td> <td></td> </tr> </table> |   | Name:        | Phone:                   | Fax:    | E-mail: | Remove: | Mat E. Carlile | 81-536-4136 | 801-536-0085 | <u>MCARLILE@utah.gov</u> |  |
| Name:   | Phone:  | Fax:         | E-mail:                  | Remove: |         |         |                |             |              |                          |  |
| Mat E. Carlile  | 81-536-4136   | 801-536-0085 | <u>MCARLILE@utah.gov</u> |         |         |         |                |             |              |                          |  |
| <small>(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)</small>  |   |              |                          |         |         |         |                |             |              |                          |  |
| 2.  | <b>Title of rule or section (catchline):</b><br>Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves.  |              |                          |         |         |         |                |             |              |                          |  |
| 3.  | <b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b><br>Rule R307-302 identifies no-burn periods for residential woodburning stoves and fireplaces in areas that sometimes exceed the health standards for fine particulate and carbon monoxide. Subsection 19-2-104(1)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source."   |              |                          |         |         |         |                |             |              |                          |  |
| 4.  | <b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b><br>R307-302 was last reviewed on June 19, 2003. R307-302 has been revised once since the last review: DAR 27761, published April 1, 2005, and effective on September 2, 2005. DAQ received six written comment. COMMENT ONE: The revised rules exempt sources constructed before certain dates; in R307-201-3, the date is April 21, 1975. The original idea behind grandfathering was that eventually this equipment would be replaced by newer equipment with better controls. RESPONSE: Sources are required to undergo a New Source Review, and lose grandfathered status, when they modify their operations. A source is no longer grandfathered if it moves to another location, and does not regain grandfathered status if it returns to the original location. A grandfathered source must meet specific emission limits required in a SIP or maintenance plan. Any equipment brought into Utah from another state is not grandfathered at the new location in Utah, and is subject to New Source Review rules. Generally, our New Source Review is more stringent than New Source Performance Standards. COMMENT TWO: R307-302-3(3) "Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves: PM <sub>10</sub> contingency plan." - EPA |              |                          |         |         |         |                |             |              |                          |  |

stated it has never incorporated Utah's PM<sub>10</sub> contingency measure into Utah's SIP and want to know if DAQ is requesting incorporation of the PM<sub>10</sub> contingency measures by adopting this rule. RESPONSE: Utah withdrew submittal of the previous PM<sub>10</sub> Contingency Measures on EPA's recommendation, but they are still part of the Utah PM<sub>10</sub> SIP under Utah law. We are adding a new sentence at the beginning of Subsection IX.A.10.c(10) to read as follows: "This Contingency Plan supercedes Subsection IX.A.8, Contingency Measures, which is part of the original PM<sub>10</sub> SIP," and will give public notice of that change if it is adopted by the Air Quality Board. If the current proposals are adopted, the new PM<sub>10</sub> Maintenance Plan will include as a contingency measure a re-evaluation of the threshold that triggers a red-burn day, and R307-302-3(3) will immediately require that red-burn days be triggered at 110  $\mu\text{m}^3$  instead of the current 120  $\mu\text{m}^3$ . Thus, in case the PM<sub>10</sub> contingency measures are ever triggered, the 110  $\mu\text{m}^3$  trigger for red-burn days would be implemented immediately, and DAQ will research whether that is the appropriate trigger level, and whether and how to implement other contingency measures listed in the Maintenance Plan. COMMENT THREE: In R307-302-3(4), the phrase "After January 1, 1999" is outdated and should be deleted. RESPONSE: DAQ agrees, and has removed the phrase to read as follows: "When the ambient concentration of PM<sub>2.5</sub> measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties..." COMMENT FOUR: R307-302-3(4) "Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves: No-Burn Periods for Fine Particulate." - EPA asked for an explanation of the rationale for calling no burning period when PM<sub>2.5</sub> levels reach 52 microgram per cubic meter. RESPONSE: On January 6, 1999, the Air Quality Board added the rule to call no-burn periods when PM<sub>2.5</sub> levels are high and increasing, in order to protect public health and avoid exceeding the then-new health standard for PM<sub>2.5</sub>. Such a requirement is not federally-required, has never been submitted to EPA for approval in any SIP, and will not be submitted to EPA as part of the PM<sub>10</sub> Maintenance Plan. It is a state-imposed pro-active requirement to protect the health of Utah citizens. COMMENT FIVE: Deleted section R307-302-4 "Davis, Salt Lake, Utah, Weber Counties: Residential Fireplaces and Stoves: violations" - EPA wants to know how DAQ intends to enforce no-burn periods if this provision is removed. RESPONSE: Provisions outlined in this deleted section of R307-302 are established in R307-302-3 (2), (4), and R307-302-4 (1). DAQ removed this section of the rule to reduce redundancy. It is not necessary to have a separate provision in the rule stating that not complying with the conditions of the rule is a violation of the rule. As with all of our other rules, if a person does not comply with the requirements it is considered a violation of the rule. COMMENT SIX: R307-302-4 allows the executive secretary to use either meteorological conditions or monitored pollution levels, to trigger a no-burn period for Carbon Monoxide. Similar flexibility for Fine Particles should be include in R307-302-3. RESPONSE: The current language of R307-302-3 provides enough flexibility to call a no-burn period when it is needed and most effective. DAQ uses its experience with pollution data and its relationship with meteorological conditions to call no burn periods.

5. **A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:**  
The provisions to regulate residential woodburning are part of the requirements to reduce particulates and carbon monoxide that are included in Utah's state implementation plans for PM<sub>10</sub> and carbon monoxide. The provisions in this rule are needed to reduce pollution during winter temperature inversions when pollutants build up in the air so the rule should

|   |   |
|---|---|
|   | be continued.   |
| 6.  | <b>Indexing information – keywords (maximum of four, in lower case):</b><br>woodburning, fireplace, stove, PM 10                                |
| 7.  | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing. |
| <b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date. |   |

### AGENCY AUTHORIZATION

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|--|---|------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date</b><br>(mm/dd/yyyy): | 8/10/2005 |
|--|---|------------------------------|-----------|

**R307. Environmental Quality, Air Quality.**

**R307-302. Davis, Salt Lake, Utah, Weber Counties:**

**Residential Fireplaces and Stoves.**

**R307-302-1. Definitions.**

The following additional definition applies to R307-302:

"Sole Source of Heat" means the residential solid fuel burning device is the only available source of heat for the entire residence, except for small portable heaters.

**R307-302-2. Applicability**

(1) R307-302-3 shall apply in all regions of Utah County north of the southernmost border of Payson City and east of State Route 68, all of Salt Lake County, all of Davis County, and in all regions of Weber County west of the Wasatch Mountain Range.

(2) R307-302-4 shall apply only within the city limits of Provo in Utah County.

(3) R307-302-5 shall apply in both areas.

**R307-302-3. No-Burn Periods for Fine Particulate.**

(1) Sole source of residential heating.

(a) Previously registered sole source residential solid fuel burning devices in areas described in (i), (ii), and (iii) below must continue to be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below. No new registrations will be accepted in these areas.

(i) Areas of Utah County north of the southernmost border of Payson City and east of State Route 68,

(ii) all of Salt Lake County, and

(iii) areas in Davis County that are south of the southernmost border of Kaysville

(b) By November 1, 2006, all sole source residential solid fuels burning devices in Weber County west of the Wasatch Mountain Range and areas north of the southernmost border of Kaysville must be registered with the executive secretary or local health district office in order to be exempt during mandatory no-burn periods as detailed below.

(2) When the ambient concentration of PM10 measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties reaches the level of 120 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours, the executive secretary will issue a public announcement and will distribute such

announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those areas or counties impacting the real-time monitoring site registering the 120 micrograms per cubic meter concentration. Residents of the affected areas shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and registered with the executive secretary or the local health district office, or those having no visible emissions.

(3) PM10 Contingency Plan. If the PM10 Contingency Plan described in Section IX, Part A, of the state implementation plan has been implemented, the following actions will be implemented immediately:

(a) The trigger level for no-burn periods as specified in (2) above will be 110 micrograms per cubic meter for that area where the PM10 Contingency Plan has been implemented; and

(b) In the regions of Utah County north of the southernmost border of Payson City and east of State Route 68, Salt Lake County, Davis County, and all regions of Weber County west of the Wasatch Mountain Range, it shall be unlawful to sell or install for use as a solid fuel burning device any used solid fuel burning device that is not approved by the Environmental Protection Agency.

(4) When the ambient concentration of PM2.5 measured by the monitors in Salt Lake, Davis, Weber, or Utah Counties reaches the level of 52 micrograms per cubic meter and the forecasted weather for the specific area includes a temperature inversion which is predicted to continue for at least 24 hours, the executive secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect. The mandatory no-burn periods will only apply to those areas or counties impacting the real-time monitoring site registering the 52 micrograms per cubic meter concentration. Residents of Salt Lake County, Davis County, or the affected areas of Utah and Weber Counties shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and registered with the executive secretary or the local health district office, or those having no visible emissions.

**R307-302-4. No-Burn Periods for Carbon Monoxide.**

(1) Beginning on November 1 and through March 1, the executive secretary will issue a public announcement and will distribute such announcement to the local media notifying the public that a mandatory no-burn period for residential solid fuel burning devices and fireplaces is in effect when the running eight-hour average carbon monoxide concentration as monitored by the state at 4:00 PM reaches a value of 6.0 ppm or more.

(2) In addition to the conditions contained in (1) above, the executive secretary may use meteorological conditions to initiate a no-burn period. These conditions are:

- (a) a national weather service forecasted clearing index value of 250 or less;
- (b) forecasted wind speeds of three miles per hour or less;
- (c) passage of a vigorous cold front through the Wasatch Front; or
- (d) arrival of a strong high pressure system into the area.

(3) During the no-burn periods specified in (1) and (2) above, residents of Provo City shall not use residential solid fuel burning devices or fireplaces except those that are the sole source of heat for the entire residence and are registered with the executive secretary or the local health district office, or those having no visible emissions.

**R307-302-5. Opacity for Residential Heating.**

Except during no-burn periods as required by R307-302-3 and 4, visible emissions from residential solid fuel burning devices and fireplaces shall be limited to a shade or density no darker than 20% opacity as measured by EPA Method 9, except for the following:

- (1) An initial fifteen minute start-up period, and
- (2) A period of fifteen minutes in any three-hour period in which emissions may exceed the 20% opacity limitation for refueling.

**KEY: air pollution, woodburning, fireplace, stove**  
2005  
19-2-101  
19-2-104



R307-305

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

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|---|---|--------------|-------------------|----------------|---------------|-------------|----------------|----------------|----------------|--------------|--------------|-------------------|--|
| DAR file no:  |   | Date filed:  |                   |                |               |             |                |                |                |              |              |                   |  |
| Utah Admin. R307-305  |   | Time filed:  |                   |                |               |             |                |                |                |              |              |                   |  |
| Code ref. (R no.):  |   |              |                   |                |               |             |                |                |                |              |              |                   |  |
| <p>1. Agency: Environmental Quality/Air Quality</p> <p>Room no.:</p> <p>Building:</p> <p>Street address 1: 150 N 1950 W</p> <p>Street address 2:</p> <p>City,state,zip: SALT LAKE CITY, UT 84116-3085</p> <p>Mailing address 1: PO BOX 144820</p> <p>Mailing address 2:</p> <p>City,state,zip: SALT LAKE CITY, UT 84114-4820</p> <p>Contact person(s):</p> <table border="0"> <tr> <td><b>Name:</b></td> <td><b>Phone:</b></td> <td><b>Fax:</b></td> <td><b>E-mail:</b></td> <td><b>Remove:</b></td> </tr> <tr> <td>Mat E. Carlile</td> <td>801-536-4136</td> <td>801-536-0085</td> <td>MCARLILE@utah.gov</td> <td></td> </tr> </table> |   |              |                   | <b>Name:</b>   | <b>Phone:</b> | <b>Fax:</b> | <b>E-mail:</b> | <b>Remove:</b> | Mat E. Carlile | 801-536-4136 | 801-536-0085 | MCARLILE@utah.gov |  |
| <b>Name:</b>  | <b>Phone:</b>   | <b>Fax:</b>  | <b>E-mail:</b>    | <b>Remove:</b> |               |             |                |                |                |              |              |                   |  |
| Mat E. Carlile  | 801-536-4136  | 801-536-0085 | MCARLILE@utah.gov |                |               |             |                |                |                |              |              |                   |  |
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| 2.  | <p><b>Title of rule or section (catchline):</b></p> <p>Nonattainment and Maintenance Areas for PM<sub>10</sub>: Emission Standards.</p>   |              |                   |                |               |             |                |                |                |              |              |                   |  |
| 3.  | <p><b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b></p> <p>Rule R307-305 sets visible emission limits, testing methods and schedules, and compliance schedules for sources of air pollution that are regulated under Utah's PM<sub>10</sub> state implementation plan to protect public health. Subsection 19-2-104(1)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source."</p>  |              |                   |                |               |             |                |                |                |              |              |                   |  |
| 4.  | <p><b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b></p> <p>R307-305 was last reviewed on June 19, 2003. R307-305 has been revised once since the last review: DAR 27761, published April 1, 2005, and effective on September 2, 2005. DAQ received nine written comments since the last review. COMMENT ONE: DAQ eliminates language in R307-305-4 stating that existing sources shall use RACM to the extent necessary to ensure attainment and maintenance of the NAAQS. The language should be modified to say that the executive secretary will establish limitations to ensure attainment and maintenance of the NAAQS. RESPONSE: The SIP and maintenance plan demonstrate attainment and maintenance of the standard, and all of the control strategies that were relied on in the SIP are already enforceable (Part H, R307 rules, approval orders and NSR requirements, etc.). It is not necessary to state that the executive secretary will establish these emission limitations because the limits have already been established as part of the PM<sub>10</sub> SIP and maintenance plan. The purpose statement in R307-305-1 states that the emission standards and work practices in the rule were established to meet the RACM requirement in section 189(a)(1)(C) of the Act. R307-305-4 requires sources to comply</p> |              |                   |                |               |             |                |                |                |              |              |                   |  |

with Part H of the PM<sub>10</sub> SIP. R307-305-3 requires sources to meet visible emission standards. COMMENT TWO: Currently, R307-305-2 provides that "Specific limitations for installations within a source listed in the SIP which are not specified will be set by order of the Board. Specific limitations for installations within a source may be adjusted by order of the Board provided the adjustment does not adversely affecting achieving the applicable NAAQS." We want to ensure that these rule changes do not impose a limitation on sources to make changes through DAQ's permitting rules without going through the entire SIP revision process. Prohibiting modifications to a SIP source without undergoing a complete SIP revision while allowing modifications at non-SIP sources through the usual permitting process, would raise fundamental issues of fairness and equal protection. RESPONSE: Part H of the SIP has been revised to include only sources or emission units that are large enough to individually affect the attainment and maintenance demonstration. Changes at these sources that increase emissions or change the character of emissions would need to be verified through the SIP process to ensure that the area continues to maintain the PM<sub>10</sub> standard. Section H.3 of the SIP establishes a process that a source could use to establish alternative emission limitations. As described in that section, a source can make a demonstration that the alternative limitation is as stringent or is more stringent than the SIP limitation. This process will allow the sources in Part H of the SIP to make necessary changes. Sources that are not listed in Part H of the SIP affect the attainment and maintenance demonstration as a group, but would not affect the demonstration on an individual basis. Growth factors are applied to stationary source emissions in the projected emission inventories to account for expected changes to the overall category. A SIP revision is not needed to address individual changes because changes to the category are already included in the demonstration. COMMENT THREE: IX.H.2.k(1)(c) specifies opacity limits for the boiler stacks, except as provided in R307-201-1(7). [NOTE: Correct cite is R307-201-3(7).] The proposed rule revisions limit applicability of R307-201 to the attainment areas of the state and thus do not apply to Kennecott. The exception to opacity limits is needed to recognize the impossibility of meeting strict 6-minute opacity limits during initial warm-up, soot-blowing, etc. That language should be added to R307-305, the new rule that applies to nonattainment and maintenance areas. RESPONSE: This provision was erroneously left out of R307-305, and DAQ added this exception to R307-305-3(4). COMMENT FOUR: Presently, R307-201 addresses opacity limits statewide and R307-305 addresses opacity limits in nonattainment areas. UIENC endorses the amendments that clarify the applicability of these two rules, but these amendments have the unintended effect of eliminating the exceptions to opacity restrictions that currently apply in the nonattainment areas, and results in a significantly more stringent opacity limit than currently exists. We assume this change is an unintended consequence of untangling R307-201 and R307-305; if it is intended, then we request that DAQ re-notice the proposal and provide clear notice of the change in stringency and a rationale for doing so, as well as estimates of the effects on industry, including costs. RESPONSE: This provision was erroneously left out of R307-305, and DAQ added this exception to R307-305-3(4). COMMENT FIVE: Add a provision to R307-201, 206, 207, 302, 305, 306, 309 and other rules with visible opacity emission limits to allow alternatives to EPA Method 9 (40 CFR Part 60, Appendix A). Any alternative would be approved by the Executive Secretary on a case-by-case basis. One such alternative could be the Digital Opacity Compliance System (DOCS). Requirement for such a system could be included in Approval Orders and/or Title V

permits. RESPONSE: It is premature to add Digital Opacity Compliance System (DOCS) as an alternative to EPA Method 9. DAQ agrees that DOCS can be beneficial; and will continue to allow DOCS as an option for periodic monitoring through operating permits. DAQ will reconsider adding such a provisions to its rules, if DOCS receive federal approval. COMMENT SIX: EPA stated that opacity standards for diesel engines must exempt locomotives, because states are preempted (or not allowed) to set opacity standards for locomotive engines. EPA suggested the following language for these provisions: "Emissions from diesel engines, except locomotives, manufactured..." RESPONSE: DAQ made the suggested revision in R307-305-3(3) to reads as follows: "R307-305-3(3)Emissions from diesel engines, except locomotives, shall be of a shade or density no darker than 20% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding three minutes in any hour." COMMENT SEVEN: EPA believes that DAQ should establish a schedule for collecting back half emissions data. EPA also stated that DAQ should use Method 202 and not a method to be approved by the executive secretary. RESPONSE: DAQ has been collecting back half emissions data since 1991. Therefore, a schedule is not necessary. DAQ has not proposed to eliminate this requirement. DAQ agrees that Method 202 should be used to collect back half data. R307-305-5 was revised to read as follows: "Compliance testing for PM<sub>10</sub>, sulfur dioxide, and oxides of nitrogen emission limitations shall be done in accordance with Section IX, Part H of the state implementation plan. PM<sub>10</sub> compliance shall be determined from the results of EPA test method 201 or 201a. A backhalf analysis shall be performed for inventory purposes for each PM<sub>10</sub> compliance test in accordance with Method 202, or other appropriate EPA approved reference method. COMMENT EIGHT: Deleted section R307-305-5 through 7 "Emission standards for sources located in PM<sub>10</sub> nonattainment and maintenance areas: TSP provisions" - EPA states that DAQ will need to demonstrate that removal of the TSP provisions will not interfere with applicable requirements of CAA (see section 110(1) and 193). RESPONSE: R307-305 used to contain emission limits for large sources of particulate matter in all of the TSP nonattainment areas (Utah County, Salt Lake County, Davis County and Weber County). These emission limits were established as part of the TSP SIP in 1979. In 1987, EPA replaced the TSP standard with the PM<sub>10</sub> standard, but the existing TSP SIP and emission limits were maintained to ensure that attainment of the PM<sub>10</sub> standard was not affected. When the PM<sub>10</sub> SIPs for Utah County and Salt Lake County were developed in the early 1990s, the emission limits in R307-305 for Utah, Salt Lake and Davis Counties were removed from the rule because the PM<sub>10</sub> SIP addressed all of the major sources of PM<sub>10</sub> in the area. The Weber County provisions were left in place because that area was not covered by the PM<sub>10</sub> SIP (Weber County was designated attainment for PM<sub>10</sub>). However, a provision was added to the rule stating that the source specific provisions in Weber County would continue to apply unless modified by an approval order or compliance order issued after February 16, 1982. As explained in the memo to the Board for the rule proposal, all of the listed sources in Weber County have either shut down or have received an approval order that either contains the emission limitation that is in the rule, or a more stringent emission limitation. In addition, the new PM<sub>10</sub> maintenance plan addresses all major sources of PM<sub>10</sub> or its precursors that impact the Ogden City nonattainment area. The bottom line is that removing these provisions will have absolutely no effect. The provisions were developed as part of a SIP that no longer exists, for a TSP standard that no longer exists, and in many cases for sources that no longer exists.

Since there will be no reduction in the requirements for any of these sources, there will be no effect on applicable provisions of the Clean Air Act. COMMENT NINE: R307-305-7 "Emission standards for sources located in PM<sub>10</sub> nonattainment and maintenance areas: compliance schedule," R307-306-7 "Abrasive blasting: compliance schedule," and R307-309-3(3) "Compliance Schedule" - EPA is concerned that there is a gap in regulatory coverage during the first 6 months after an area is designated nonattainment for PM<sub>10</sub>, because rules for nonattainment areas do not apply to sources immediately when an area is designated nonattainment. Instead sources have six months to comply with the relevant nonattainment provisions. RESPONSE: DAQ added language to R307-305-7, R307-306-7, and R307-309-3(3) that clarifies statewide (R307-201, R307-205, and R307-206) rules continue to apply during 180 day transition period. These rules now read as follows: R307-305-7 "The provisions of R307-305 shall apply to the owner or operator of a source that is located in any new PM<sub>10</sub> nonattainment area 180 days after the area is officially designated a nonattainment area for PM<sub>10</sub> by the Environmental Protection Agency. Provisions of R307-201 shall continue to apply to the owner or operator of a source during this transition period." R307-306-7 "The provisions of R307-306 shall apply in any new PM<sub>10</sub> nonattainment area 180 days after the area is officially designated a nonattainment area for PM<sub>10</sub> by the Environmental Protection Agency. Provisions of R307-206 shall continue to apply to the owner or operator of a source during this transition period." R307-309-3(3) "Compliance Schedule. Any source located in a new nonattainment area for PM<sub>10</sub> is subject to R307-309 180 days after the area is designated nonattainment by the Environmental Protection Agency. Provisions of R307-205 shall continue to apply to the owner or operator of a source during this transition period."

5. **A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:**  
Emission limits and testing of emissions helps to ensure that industrial facilities are operating properly and emitting the least possible pollution to protect human health which this rule outlines and should be continued.

6. **Indexing information – keywords (maximum of four, in lower case):**  
air pollution, particulate matter, PM10, PM 2.5

7. **Attach an RTF document containing the text of this rule change (filename):**  
There is currently a document associated with this filing.

**To the agency:** Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.

### AGENCY AUTHORIZATION

|  |   |                       |           |
|--|---|-----------------------|-----------|
| Agency head or designee,<br>and title: | M. Cheryl Heying<br>Planning Branch Manager | Date<br>(mm/dd/yyyy): | 8/10/2005 |
|--|---|-----------------------|-----------|

**R307. Environmental Quality, Air Quality.**

**R307-305. Nonattainment and Maintenance Areas for PM10:  
Emission Standards.**

**R307-305-1. Purpose.**

This rule establishes emission standards and work practices for sources located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures requirement in section 189(a)(1)(C) of the Act.

**R307-305-2. Applicability.**

The requirements of R307-305 apply to the owner or operator of any source that is listed in Section IX, Part H of the state implementation plan or located in a PM10 nonattainment or maintenance area.

**R307-305-3. Visible Emissions.**

(1) Visible emissions from existing installations except diesel engines shall be of a shade or density no darker than 20% opacity. Visible emissions shall be measured using EPA Method 9.

(2) No owner or operator of a gasoline engine or vehicle shall allow, cause or permit the emissions of visible contaminants.

(3) Emissions from diesel engines, except locomotives, shall be of a shade or density no darker than 20% opacity, except for starting motion no farther than 100 yards or for stationary operation not exceeding three minutes in any hour.

(4) Visible emissions exceeding the opacity standards for short time periods as the result of initial warm-up, soot blowing, cleaning of grates, building of boiler fires, cooling, etc., caused by start-up or shutdown of a facility, installation or operation, or unavoidable combustion irregularities which do not exceed three minutes in length (unavoidable combustion irregularities which exceed three minutes in length must be handled in accordance with R307-107), shall not be deemed in violation provided that the executive secretary finds that adequate control technology has been applied. The owner or operator shall minimize visible and non-visible emissions during start-up or shutdown of a facility, installation, or operation through the use of adequate control technology and proper procedures.

**R307-305-4. Particulate Emission Limitations and Operating Parameters (PM10).**

Any source with emission limits included in Section IX, Part H, of the Utah state implementation plan shall comply with those emission limitations and operating parameters. Specific limitations will be set by the executive secretary, through an approval order issued under R307-401, for installations within a source that do not have limitations specified in the state implementation plan.

**R307-305-5. Compliance Testing (PM10).**

Compliance testing for PM10, sulfur dioxide, and oxides of nitrogen emission limitations shall be done in accordance with Section IX, Part H of the state implementation plan. PM10 compliance shall be determined from the results of EPA test method 201 or 201a. A backhalf analysis shall be performed for inventory purposes for each PM10 compliance test in accordance with Method 202, or other appropriate EPA approved reference method.

**R307-305-6. Automobile Emission Control Devices.**

Any person owning or operating any motor vehicle or motor vehicle engine registered in the State of Utah on which is installed or incorporated a system or device for the control of crankcase emissions or exhaust emissions in compliance with the Federal motor vehicle rules, shall maintain the system or device in operable condition and shall use it at all times that the motor vehicle or motor vehicle engine is operated. No person shall remove or make inoperable within the State of Utah the system or device or any part thereof, except for the purpose of installing another system or device, or part thereof, which is equally or more effective in reducing emissions from the vehicle to the atmosphere.

**R307-305-7. Compliance Schedule for New Nonattainment Areas.**

The provisions of R307-305 shall apply to the owner or operator of a source that is located in any new PM10 nonattainment area 180 days after the area is officially designated a nonattainment area for PM10 by the Environmental Protection Agency. Provisions of R307-201 shall continue to apply to the owner or operator of a source during this transition period.

**KEY:** air pollution, particulate matter, PM10, PM 2.5

2005

19-2-104 (1)(a)



R307-307



State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

|   |   |                            |                   |                |               |             |                |                |                |              |              |                   |  |
|---|---|----------------------------|-------------------|----------------|---------------|-------------|----------------|----------------|----------------|--------------|--------------|-------------------|--|
| DAR file no:<br>Utah Admin. R307-307<br>Code ref. (R no.):  |   | Date filed:<br>Time filed: |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>1. Agency:</b> Environmental Quality/Air Quality<br><b>Room no.:</b><br><b>Building:</b><br><b>Street address 1:</b> 150 N 1950 W<br><b>Street address 2:</b><br><b>City, state, zip:</b> SALT LAKE CITY, UT 84116-3085<br><b>Mailing address 1:</b> PO BOX 144820<br><b>Mailing address 2:</b><br><b>City, state, zip:</b> SALT LAKE CITY, UT 84114-4820<br><b>Contact person(s):</b><br><table><tr><td><b>Name:</b></td><td><b>Phone:</b></td><td><b>Fax:</b></td><td><b>E-mail:</b></td><td><b>Remove:</b></td></tr><tr><td>Mat E. Carlile</td><td>801-536-4136</td><td>801-536-0085</td><td>MCARLILE@utah.gov</td><td></td></tr></table> |   |                            |                   | <b>Name:</b>   | <b>Phone:</b> | <b>Fax:</b> | <b>E-mail:</b> | <b>Remove:</b> | Mat E. Carlile | 801-536-4136 | 801-536-0085 | MCARLILE@utah.gov |  |
| <b>Name:</b>  | <b>Phone:</b>   | <b>Fax:</b>                | <b>E-mail:</b>    | <b>Remove:</b> |               |             |                |                |                |              |              |                   |  |
| Mat E. Carlile  | 801-536-4136  | 801-536-0085               | MCARLILE@utah.gov |                |               |             |                |                |                |              |              |                   |  |
| (Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)   |   |                            |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>2.</b>   | <b>Title of rule or section (catchline):</b><br>Davis, Salt Lake, and Utah Counties: Road Salting and Sanding   |                            |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>3.</b>   | <b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b><br>Rule R307-307 sets limits on the particulate matter that may be included in salt used on roads. The limits are needed to reduce the particulate matter that is harmful to human health, and are one of the measures included in Utah's state implementation plan for PM10. Subsection 19-2-104(1)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source." |                            |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>4.</b>   | <b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b><br>No written comments have been received.  |                            |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>5.</b>   | <b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br>The limits in this rule are needed to reduce particulate matter, and are one of the measures included in Utah's state implementation plan for PM10 and should be continued.  |                            |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>6.</b>   | <b>Indexing information - keywords (maximum of four, in lower case):</b><br>Particulate matter, PM10, air pollution   |                            |                   |                |               |             |                |                |                |              |              |                   |  |
| <b>7.</b>   | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing.   |                            |                   |                |               |             |                |                |                |              |              |                   |  |

**To the agency:** Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date.

**AGENCY AUTHORIZATION**

|  |   |                              |           |
|--|---|------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date</b><br>(mm/dd/yyyy): | 8/10/2005 |
|--|---|------------------------------|-----------|

**R307. Environmental Quality, Air Quality.**

**R307-307. Davis, Salt Lake, and Utah Counties: Road Salting and Sanding.**

**R307-307-1. Records.**

Any person who applies salt, crushed slag, or sand to roads in Salt Lake, Davis or Utah Counties shall maintain records of the material applied. For salt, the records shall include the quantity applied, the percent by weight of insoluble solids in the salt, and the percentage of the material that is sodium chloride.

For sand or crushed slag the records shall include the quantity applied and the percent by weight of fine material which passes the number 200 sieve in a standard gradation analysis. All records shall be maintained for a period of at least two years, and the records shall be made available to the Executive Secretary or his designated representative upon request.

**R307-307-2. Content.**

After October 1, 1993, any salt applied to roads in Salt Lake, Davis, or Utah Counties must be at least 92% sodium chloride (NaCl).

**R307-307-3. Alternatives.**

(1) After October 1, 1993, any person who applies crushed slag, sand, or salt that is less than 92% sodium chloride to roads in Salt Lake, Davis, or Utah Counties must either:

(a) demonstrate to the Board that the material applied has no more PM<sub>10</sub> emissions than salt which is at least 92% sodium chloride; or

(b) vacuum sweep every arterial roadway (principle and minor) to which the material was applied within three days of the end of the storm for which the application was made. For the purpose of this rule, the term "arterial roadway" shall have the meaning outlined in U.S. DOT Federal Highway Administration Publication No. FHWA-ED-90-006, Revised March 1989, "Highway Functional Classification: Concepts, Criteria, and Procedures" as interpreted by Utah Department of Transportation and shown in the following maps: Salt Lake Urbanized Area, Provo-Orem Urbanized Area, and Ogden Urbanized Area (1992 or later).

(2) In the interest of public safety, any person who applies crushed slag and/or sand to arterial roadways because salt alone would not ensure safe driving conditions due to steepness of grade, extreme weather, or other reasons, may petition the Board for a variance from the sweeping requirements in (1)(b) above. Specifically excluded from these sweeping requirements are all canyon roads and the portion of Interstate 15 near Point of the Mountain.

**KEY: air pollution, roads, particulate**  
**September 15, 1998**  
**Notice of Continuation June 19, 2003**

**19-2-104**

R307-309

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

DAR file no:

Utah Admin. R307-309

Date filed:

Time filed:

Code ref. (R no.):

1. Agency: Environmental Quality/Air Quality

Room no.:

Building:

Street address 1: 150 N 1950 W

Street address 2:

City,state,zip: SALT LAKE CITY, UT 84116-3085

Mailing address 1: PO BOX 144820

Mailing address 2:

City,state,zip: SALT LAKE CITY, UT 84114-4820

Contact person(s):

Name:

Phone:

Fax:

E-mail:

Remove:

Mat E. Carlile

801-536-4136

801-536-0085

MCARLILE@utah.gov

(Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)

2. **Title of rule or section (catchline):**

Nonattainment and Maintenance Areas for PM<sub>10</sub>: Fugitive Emissions and Fugitive Dust.

3. **A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:**

Rule R307-309 regulates the amount of dust and fugitive emissions that are allowed to leave the site of any source of air pollution. These regulations are part of the state implementation plan to control PM<sub>10</sub> in geographic areas where levels of pollution have exceeded federal health standards in the past; the plan is incorporated by reference under Section R307-110-10. The plan is required under the Clean Air Act, 42 U.S.C. 7410. Subsection 19-2-104(1) authorizes the Air Quality Board to make rules "(a) regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contamination that may be emitted by any air contaminant source"; and "(b) establishing air quality standards." Subsection 19-2-104(3)(q) authorizes the Board to make rules to "meet the requirements of federal air pollution laws."

4. **A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:**

R307-309 was last reviewed on June 8, 2004. R307-309 has been revised once since the last review: DAR 27765, published April 1, 2005, and effective on September 2, 2005. DAQ received six written comments since the last review. COMMENT ONE: KUCC has an objection concerning this use of a modified form of Method 9. In summary, any modified form of Method 9 used as an enforcement standard for intermittent or mobile sources, as opposed to a trigger for further action, is not a verifiable method, is not an approved method, and imposes a standard more restrictive than corresponding federal regulations and, according to Utah Code 19-2-106, cannot be maintained without a written finding after public comment and hearing and based on evidence in the record, that corresponding federal regulations are not adequate to protect public health and the

environment of the state. For the reasons given regarding opacity observations for Intermittent and mobile sources, the following items should be deleted: the second sentence of proposed R307-201-3(9), the second sentence of R307-206-5(1), the second sentence of proposed R307-306-5(1), the third sentence of R307-309-4, and the second sentence of proposed R307-309-5(3). **RESPONSE:** The provision of R307-201 governing the method to enforce opacity observers for mobile and intermittent sources has been in effect for over 25 years. DAQ added this provision to the other rules to clarify that this provision of R307-201 would continue to apply, because DAQ separated its rules into two categories, State only rules and rules that will apply in only nonattainment and maintenance areas. DAQ staff recommends not deleting these provisions from the rules. DAQ's Compliance staff have indicated that these provisions are needed. It is necessary to have a method to enforce opacity limits for mobile and intermittent sources and EPA Method 9 is not intended to measure opacity limits for mobile and intermittent sources. Utah Code 19-2-106 restricts DAQ from developing a standard more restrictive than the corresponding federal regulation; however, there is no corresponding federal regulation for measuring opacity emissions limits for mobile and intermittent sources. Therefore, DAQ developed a method to measure compliance of opacity emission limits for mobile and intermittent sources consistent with EPA Method 9. **COMMENT TWO:** R307-309-3: This provision exempts sources from meeting opacity limits when a specific wind speed is exceeded. EPA is concerned that this exemption does not have any relationship to or consideration of meeting NAAQS and grants inappropriate director discretion. DAQ modified the wind speed from 25 mph to 30 mph, to match the Nation Events Policy (NEP). However, EPA does not believe that the NEP addresses a specific wind speed for high wind events. EPA is concerned that high-wind exemptions are problematic. **RESPONSE:** Originally DAQ recommended modifying the wind speed from 25 mph to 30 mph, to match the Utah Nature Events Action Plan (NEAP). The NEAP helps to diagnose when an event is natural and not a manmade exceedance of the NAAQS. However, the Board decided to keep the wind speed at 25 mph. **COMMENT THREE:** EPA is concerned with R307-309 directing sources to "minimize" fugitive dust, because this requirement is not practical to enforce. **RESPONSE:** The requirement to minimize fugitive dust is enforceable. First, all sources of fugitive dust are subject to a numeric opacity limit. This opacity limit provides an enforcement baseline. In addition, any person owning or operating a source of fugitive dust must submit a fugitive dust plan to the executive secretary. A fugitive dust plan requires the owner and operator of a source to minimize fugitive dust to the maximum extend possible. Because these fugitive dust plans are source specific, it would be illegal to list them in R307-309 (Utah Code 63-46a-3 (2)(c)). Finally, the Utah Court of Appeals upheld an enforcement action that cited a trucking company for failing to minimizing fugitive dust. The following is citation from that case: "Second, petitioner argues that "[t]he Utah Air Quality Board abused its discretion in upholding a citation for fugitive dust based on a single, inadequate reading." Petitioner maintains that because the DAQ environmental scientists failed to take six opacity readings for the Ralph Smith truck, they failed to comply with the DAQ rules. However, as respondent points out, petitioner was cited for failing to minimize fugitive dust under Rule 307-12-3 (3.b) (1) (R307-12 is now R2037-309) of the Utah Administrative Code, not for violating the opacity standards for fugitive emissions under Rule 307-12-2 of the Utah Administrative Code. Because opacity readings are not required under Rule 307-12-3 (3.b) (1), that evidence was relevant only to support the DAQ's claim that petitioner failed to

minimize fugitive dust. Accordingly, this argument fails. (Ralph Smith Company, Inc. v. Utah Air Quality Board, 990840-CA P.2 (Utah Ct. App. 2000))" COMMENT FOUR: DAQ deleted sections R307-309-5 and 6: "Storage, Hauling and Handling of Aggregate Materials and Construction and Demolition Activities." EPA asked DAQ to demonstrate that deletion of these provisions will not interfere with CAA requirements. RESPONSE: DAQ did not intend to delete these standards. DAQ will restore them so the rule will read as follows: "R307-309-7. Storage, Hauling and Handling of Aggregate Materials Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly." "R307-309-8. Construction and Demolition Activities. Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly." COMMENT FIVE: EPA has asked DAQ to demonstrate that deleting sections R307-309-7 (2)(a) and (b) "Unpaved roads" and R307-309-3(3) "Definition of road" will not interfere with CAA requirements. RESPONSE: DAQ moved the definition of Road to the general definitions in 307-101-2 rather than repeating the definition in multiple rules. DAQ removed provisions in R307-309-7 that require control measures for unpaved roads based on the number of vehicle trips per day. These requirements were established as part of the Total Suspended Particulate (TSP) plan in 1982. This rule has been in place for a long time, and discussions with DAQ staff indicate that the application of the rule focused on industrial roads such as haul roads. In addition, the area that was regulated was much smaller. The nonattainment area for TSP was based on the actual area of nonattainment rather than the county boundary, and this actual area of nonattainment corresponded to the urban area along the Wasatch Front. When the nonattainment area for PM<sub>10</sub> was designated, the entire county became nonattainment, and this rule technically applied in the rural areas of the nonattainment counties. However, with the shift to PM<sub>10</sub>, it became apparent that wintertime temperature inversions were the real problem in Utah, and unpaved roads are not a significant contributor to PM<sub>10</sub> during inversions. DAQ's research with the local MPO's has indicated that currently there are few unpaved roads in the populated areas of the nonattainment areas of Utah (the "actual area of nonattainment" for TSP). In addition, industrial source within the nonattainment areas with unpaved roads such as haul roads are subject to permitting and BACT requirements, as well as the fugitive dust plan requirements in this rule. Deleting this provision will have no effect on air quality regulation in Utah because the original intent and application of this rule has been taken over by the approval order process, or has been made moot because of the increasing urbanization along the Wasatch Front (there are very few unpaved roads remaining in the urban area). COMMENT SIX: Any fugitive dust control plan that includes a limit on activities based on wind speed being below a threshold (blasting, for example) should require the measurement and recording of wind speed by a hand-held anemometer or equivalent device. Sources should be required to document compliance with wind speed conditions when such a condition is included in a rule, an



|   |  |
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|   | approval order, or a fugitive dust control plan. <b>RESPONSE:</b> DAQ's focus is on ensuring that any source diligently carries out the components of its dust control plan in all circumstances, including during high wind events. A source that is not carrying out activities to minimize fugitive dust will be cited for that failure, whatever the wind speed may be.  |
| 5.  | <b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br>R307-309 protects the public health by reducing emissions from industries, gravel pits, constructions sites, haul trucks, mines, and tailings ponds. In addition, R307-309 is required under the state implementation plan for PM <sub>10</sub> , incorporated by reference under Section R307-110-10. The plan is required under the Clean Air Act, Section 110; without the state plan, the EPA is required to put in place its own plan. Therefore, this rule should be continued. |
| 6.  | <b>Indexing information – keywords (maximum of four, in lower case):</b><br>air pollution, dust, PM 10   |
| 7.  | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing.  |
| <b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date. |  |

### AGENCY AUTHORIZATION

|  |   |                               |           |
|--|---|-------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date<br/>(mm/dd/yyyy):</b> | 8/10/2005 |
|--|---|-------------------------------|-----------|



**R307. Environmental Quality, Air Quality.**

**R307-309. Nonattainment and Maintenance Areas for PM10:  
Fugitive Emissions and Fugitive Dust.**

**R307-309-1. Purpose.**

This rule establishes minimum work practices and emission standards for sources of fugitive emissions and fugitive dust listed in Section IX, Part H of the state implementation plan or located in PM10 nonattainment and maintenance areas to meet the reasonably available control measures for PM10 required in section 189(a)(1)(C) of the Act.

**R307-309-2. Definitions.**

The following addition definition applies to R307-309:

"Material" means sand, gravel, soil, minerals other matter that may create fugitive dust.

**R307-309-3. Applicability.**

(1) Applicability. R307-309 applies to all sources of fugitive dust and fugitive emissions listed in Section IX, Part H of the state implementation plan or located in a nonattainment or maintenance area for PM10, except as specified in (2) below.

(2) Exemptions.

(a) The provisions of R307-309 do not apply to agricultural or horticultural activities specified in 19-2-114 (1)-(3).

(b) Any activity subject to R307-307 is exempt from R307-309-7.

(3) Compliance Schedule. Any source located in a new nonattainment area for PM10 is subject to R307-309 180 days after the area is designated nonattainment by the Environmental Protection Agency. Provisions of R307-205 shall continue to apply to the owner or operator of a source during this transition period.

**R307-309-4. Fugitive Emissions.**

Fugitive emissions from any source shall not exceed 15% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. [For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

**R307-309-5. General Requirements for Fugitive Dust.**

(1) Except as provided in (2) below, opacity caused by fugitive dust shall not exceed:

- (a) 10% at the property boundary; and
- (b) 20% on site

(2) Opacity in (1) above shall not apply when the wind speed exceeds 25 miles per hour and the owner or operator is taking appropriate actions to control fugitive dust.

(a) If the source has a fugitive dust control plan approved by the executive secretary, control measures in the plan are considered appropriate.

(b) Wind speed may be measured by a hand-held anemometer or equivalent device.

(3) Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9. For intermittent sources and mobile sources, opacity observations shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply.

#### **R307-309-6. Fugitive Dust Control Plan.**

(1) Any person owning or operating a new or existing source of fugitive dust, including storage, hauling or handling operations, or engaging in clearing or leveling of land one-quarter acre or greater in size, earthmoving, excavation, or movement of trucks or construction equipment over cleared land one-quarter acre or greater in size or access haul roads, or engaging in demolition activities including razing homes, buildings or other structures shall submit a plan to control fugitive dust to the executive secretary no later than 30 days after the source becomes subject to R307-309. The plan shall address fugitive dust control strategies for the following operations as applicable:

- (a) Material Storage;
  - (b) Material handling and transfer;
  - (c) Material processing;
  - (d) Road ways and yard areas;
  - (e) Material loading and dumping;
  - (f) Hauling of materials;
  - (g) Drilling, blasting and pushing operations;
  - (h) Clearing and leveling;
  - (i) Earth moving and excavation;
  - (j) Exposed surfaces;
  - (k) Any other source of fugitive dust.
- (2) Strategies to control fugitive dust may include:
- (a) Wetting or watering;
  - (b) Chemical stabilization;
  - (c) Enclosing or covering operations;
  - (d) Planting vegetative cover;
  - (e) Providing synthetic cover;
  - (f) Wind breaks;
  - (g) Reducing vehicular traffic;
  - (h) Reducing vehicular speed;

- (i) Cleaning haul trucks before leaving loading area;
  - (j) Limiting pushing operations to wet seasons;
  - (k) Paving or cleaning road ways;
  - (l) Covering loads;
  - (m) Conveyor systems;
  - (n) Boots on drop points;
  - (o) Reducing the height of drop areas;
  - (p) Using dust collectors;
  - (q) Reducing production;
  - (r) Mulching;
  - (s) Limiting the number and power of blasts;
  - (t) Limiting blasts to non-windy days and wet seasons;
  - (u) Hydro drilling;
  - (v) Wetting materials before processing;
  - (w) Using a cattle guard before entering a paved road;
  - (x) Washing haul trucks before leaving the loading site;
  - (y) Terracing;
  - (z) Cleaning the materials that may create fugitive dust on a public or private paved road promptly; or
  - (aa) Preventing, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site.
- (3) Each source shall comply with all provisions of the fugitive dust control plan as approved by the executive secretary.

**R307-309-7. Storage, Hauling and Handling of Aggregate Materials.**

Any person owning, operating or maintaining a new or existing material storage, handling or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

**R307-309-8. Construction and Demolition Activities.**

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

**R307-309-9. Roads.**

- (1) Any person responsible for construction or maintenance

of any existing road or having right-of-way easement or possessing the right to use the same whose activities result in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

(2) Unpaved Roads. Any person responsible for construction or maintenance of any new or existing unpaved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

#### **R307-309-10. Mining Activities.**

(1) Fugitive dust, construction activities, and roadways associated with mining activities are regulated under the provisions of R307-309-10 and not by R307-309-7, 8, 9, and 11.

(2) Any person who owns or operates a mining operation shall minimize fugitive dust as an integral part of site preparation, mining activities, and reclamation operations.

(3) The fugitive dust control measures to be used may include:

- (a) periodic watering of unpaved roads,
- (b) chemical stabilization of unpaved roads,
- (c) paving of roads,
- (d) prompt removal of coal, rock minerals, soil, and other dust-forming debris from roads and frequent scraping and compaction of unpaved roads to stabilize the road surface,
- (e) restricting the speed of vehicles in and around the mining operation,
- (f) revegetating, mulching, or otherwise stabilizing the surface of all areas adjoining roads that are a source of fugitive dust,
- (g) restricting the travel of vehicles on other than established roads,
- (h) enclosing, covering, watering, or otherwise treating loaded haul trucks and railroad cars, to minimize loss of material to wind and spillage,
- (i) substitution of conveyor systems for haul trucks and covering of conveyor systems when conveyed loads are subject to wind erosion,
- (j) minimizing the area of disturbed land,
- (k) prompt revegetation of regraded lands,
- (l) planting of special windbreak vegetation at critical points in the permit area,
- (m) control of dust from drilling, using water sprays, hoods, dust collectors or other controls approved by the

executive secretary.

(n) restricting the areas to be blasted at any one time,  
(o) reducing the period of time between initially disturbing the soil and revegetating or other surface stabilization,

(p) restricting fugitive dust at spoil and coal transfer and loading points,

(q) control of dust from storage piles through use of enclosures, covers, or stabilization and other equivalent methods or techniques as approved by the executive secretary, or

(r) other techniques as determined necessary by the executive secretary.

**R307-309-11. Tailings Piles and Ponds.**

(1) Fugitive dust, construction activities, and roadways associated with tailings piles and ponds are regulated under the provisions of R307-309-11 and not by R307-309-7,8,9, and 10.

(2) Any person owning or operating an existing tailings operation where fugitive dust results from grading, excavating, depositing, or natural erosion or other causes in association with such operation shall take steps to minimize fugitive dust from such activities. Such controls may include:

- (a) watering,
- (b) chemical stabilization,
- (c) synthetic covers,
- (d) vegetative covers,
- (e) wind breaks,
- (f) minimizing the area of disturbed tailings,
- (g) restricting the speed of vehicles in and around the tailings operation, or

(h) other equivalent methods or techniques which may be approvable by the executive secretary.

**KEY: air pollution, dust, PM 10**

**2005**

**19-2-101**

**19-2-104**

**19-2-109**

R307-310

State of Utah

**FIVE-YEAR NOTICE OF REVIEW AND STATEMENTS OF  
CONTINUATION**

|   |   |                            |  |
|---|---|----------------------------|--|
| DAR file no:<br>Utah Admin. R307-310<br>Code ref. (R no.):  |   | Date filed:<br>Time filed: |  |
| 1. Agency: Environmental Quality/Air Quality<br>Room no.:<br>Building:<br>Street address 1: 150 N 1950 W<br>Street address 2:<br>City,state,zip: SALT LAKE CITY, UT 84116-3085<br>Mailing address 1: PO BOX 144820<br>Mailing address 2:<br>City,state,zip: SALT LAKE CITY, UT 84114-4820<br>Contact person(s):<br>Name: Phone: Fax: E-mail: Remove:<br>Mat E. Carlile 801-536-4136 801-536-0085 <u>MCARLILE@utah.gov</u> |   |                            |  |
| (Interested persons may inspect this filing at the above address or at DAR between 8:00 a.m. and 5:00 p.m. on business days.)   |   |                            |  |
| 2.  | <b>Title of rule or section (catchline):</b><br>Salt Lake County: Trading of Emission Budgets for Transportation Conformity.  |                            |  |
| 3.  | <b>A concise explanation of the particular statutory provisions under which the rule is enacted and how these provisions authorize or require the rule:</b><br>Subsection 19-2-104(1)(a) allows the Air Quality Board to make rules "...regarding the control, abatement, and prevention of air pollution from all sources and the establishment of the maximum quantity of air contaminants that may be emitted by any air contaminant source." In addition, 19-2-104(3)(e) allows the Board to "...prepare and develop a comprehensive plan or plans for the prevention, abatement, and control of air pollution in this state." Rule R307-310 protects the public health by sets forth a mechanism to trade PM <sub>10</sub> for NO <sub>x</sub> to demonstrate conformity with Salt Lake County PM <sub>10</sub> SIP. |                            |  |
| 4.  | <b>A summary of written comments received during and since the last five-year review of the rule from interested persons supporting or opposing the rule:</b><br>No written comments have been received.  |                            |  |
| 5.  | <b>A reasoned justification for continuation of the rule, including reasons why the agency disagrees with comments in opposition to the rule, if any:</b><br>R307-310 establishes a conformity budget for Salt Lake County because the PM <sub>10</sub> SIP did not. This budget allows continued funding of transportation projects in Salt Lake County. R307-310 will no longer be needed after the EPA approves the new conformity budget, which is established in the PM <sub>10</sub> maintenance plan adopted by the Air Quality Board on July 6, 2005. Therefore, the conformity budget established in R307-310 is needed and should be continued.   |                            |  |
| 6.  | <b>Indexing information - keywords (maximum of four, in lower case):</b><br>air pollution, transportation conformity, PM10  |                            |  |

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| 7.  | <b>Attach an RTF document containing the text of this rule change (filename):</b><br>There is currently a document associated with this filing. |
| <b>To the agency:</b> Information requested on this form is required by Section 63-46a-9. Incomplete forms will be returned to the agency for completion, possibly delaying the effective date. |   |

**AGENCY AUTHORIZATION**

|  |   |                               |           |
|--|---|-------------------------------|-----------|
| <b>Agency head or designee,<br/>and title:</b> | M. Cheryl Heying<br>Planning Branch Manager | <b>Date<br/>(mm/dd/yyyy):</b> | 8/10/2005 |
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**R307. Environmental Quality, Air Quality.**

**R307-310. Salt Lake County: Trading of Emission Budgets for Transportation Conformity.**

**R307-310-1. Purpose.**

This rule establishes the procedures that may be used to trade a portion of the primary PM10 budget when demonstrating that a transportation plan, transportation improvement program, or project conforms with the motor vehicle emission budgets in the Salt Lake County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

**R307-310-2. Definitions.**

The definitions contained in 40 CFR 93.101, effective as of July 1, 2001, are incorporated into this rule by reference. The following additional definitions apply to this rule.

"Budget" means the motor vehicle emission projections used in the attainment demonstration in the Salt Lake County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

"NOx" means oxides of nitrogen.

"Primary PM10" means PM10 that is emitted directly by a source. Primary PM10 does not include particulate matter that is formed when gaseous emissions undergo chemical reactions in the ambient air.

"Transportation Conformity" means a demonstration that a transportation plan, transportation improvement program, or project conforms with the emissions budgets in a state implementation plan, as outlined in 40 CFR, Chapter 1, Part 93, "Determining Conformity of Federal Actions to State or Federal Implementation Plans."

**R307-310-3. Applicability.**

(1) This rule applies to agencies responsible for demonstrating transportation conformity with the Salt Lake County portion of Section IX, Part A of the State Implementation Plan, "Fine Particulate Matter (PM10)."

(2) This rule does not apply to emission budgets from Section IX, Part D.2 of the State Implementation Plan, "Ozone Maintenance Plan."

(3) This rule does not apply to emission budgets from Section IX, Part C.7 of the State Implementation Plan, "Carbon Monoxide Maintenance Provisions."

**R307-310-4. Trading Between Emission Budgets.**

(1) The agencies responsible for demonstrating transportation conformity are authorized to supplement the budget for NOx with a portion of the budget for primary PM10 for the purpose of demonstrating transportation conformity for NOx. The NOx budget shall be supplemented using the following procedures.

(a) The metropolitan planning organization shall include the following information in the transportation conformity demonstration:

(i) The budget for primary PM10 and NOx for each required year of the conformity demonstration, before trading allowed by this rule has been applied;

(ii) The portion of the primary PM10 budget that will be used to supplement the NOx budget, specified in tons per day using a 1:1 ratio of primary PM10 to NOx, for each required year of the conformity demonstration;

(iii) The remainder of the primary PM10 budget that will be used in the conformity demonstration for primary PM10, specified in tons per day for each required year of the conformity demonstration; and

(iv) The budget for primary PM10 and NOx for each required year of the conformity demonstration after the trading allowed by this rule has been applied.

(b) Transportation conformity for NOx shall be demonstrated using the NOx budget supplemented by a portion of the primary PM10 budget as described in (a)(ii). Transportation conformity for primary PM10 shall be demonstrated using the remainder of the primary PM10 budget described in (a)(iii).

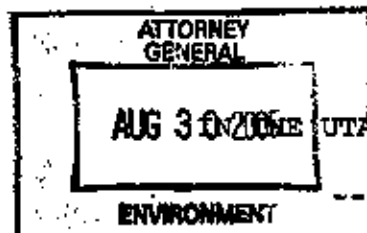
(c) The primary PM10 budget shall not be supplemented by using a portion of the NOx budget.

**R307-310-5. Transition Provision.**

R307-310, sections 1-4 will remain in effect until the day that EPA approves the conformity budget in the PM10 maintenance plan adopted by the board on July 6, 2005.

**KEY: air pollution, transportation conformity, PM10**  
**July 7, 2005**  
**19-2-104**

Court  
appeals



FILED UTAH COURT OF APPEALS UTAH APPELLATE COURTS

AUG 29 2005

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Utah Chapter of the Sierra  
Club and Grand Canyon Trust,

Petitioners,

v.

Utah Air Quality Board,

Respondent.

ORDER

Case No. 20050455-CA

Before Judges Davis, Greenwood, and Thorne.

This case is before the court on the Petitioners' Motion to Stay, the Executive Secretary's Motion to Intervene in Motion for Stay,<sup>1</sup> and the Petitioners' Motion to Supplement the Record.

The Sierra Club and Grand Canyon Trust (collectively Sierra Club) seek a stay of the proceedings before the Utah Air Quality Board (Board) adjudicating the legality of the Utah Division of Air Quality's Approval Order for construction of a coal-fired power plant in Sigurd, Utah by the Sevier Power Company. Those proceedings were commenced by a request for agency action filed by the Sevier County Citizens for Clear Air and Water, which was granted party status. The petition for review before this court is limited to review of the Board's ruling denying the Sierra Club standing as a party to pursue its separate request for agency action challenging the Approval Order, but granting the Sierra Club amicus status. The Executive Secretary moves this court to allow limited intervention for purposes of responding to the motion to stay. We grant that request, which is not opposed, and consider the Executive Secretary's response to the motion to stay.

If a petitioner seeking judicial review of final agency action is denied a stay by an agency, the petitioner may seek a stay in the appropriate appellate court under section 63-46b-18(4) of the Utah Code. The court may issue a stay only if: (i) the petitioner is likely to prevail on the merits; (ii) the

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1 The motion to intervene is filed by the Executive Secretary of the Utah Division of Air Quality.

petitioner will suffer irreparable injury without immediate relief; (iii) granting relief to petitioner will not substantially harm other parties; and (iv) "the threat to the public health, safety or welfare relied upon by the agency is not sufficiently serious to justify the agency's action under the circumstances." Utah Code Ann. § 63-46b-18(4)(2004). Based upon our review of the extensive memoranda and other materials submitted by the parties, including transcripts of the proceedings before the Board pertaining to both the standing ruling and the motion to stay, we conclude that the Sierra Club has not demonstrated that a stay of the proceedings on the Sevier Citizens' appeal before the Board should be granted.

The Sierra Club also moves this court to supplement the record on its petition for review with materials that were submitted to the Division of Air Quality in support of its challenge to the Division's decision to permit construction of the power plant proposed by the Sevier Power Company. However, the petition for review before this court limits judicial review to a review of the Board's ruling denying the Sierra Club's Statement of Standing and Petition to Intervene. Therefore, the record is limited to the filings made with the Board and the materials actually considered by the Board in making the standing ruling. In a petition for review of a formal adjudicative proceeding, our review is a record review, not a de novo review, and is limited to the record created by the agency whose ruling is being reviewed. See Utah Code Ann. § 63-46b-16(4)(2004) (providing the appellate court's determination shall be "on the basis of the agency's record.").

IT IS HEREBY ORDERED that the Executive Secretary's Motion to Intervene in Motion for Stay is granted, and

IT IS FURTHER ORDERED that the Sierra Club's Motion to Stay is denied, and

IT IS FURTHER ORDERED that the Sierra Club's Motion to Supplement the Record is denied.

Dated this 29 day of August, 2005.

FOR THE COURT:



James Z. Davis, Judge

FRED G NELSON, USB #2383  
Assistant Attorney General  
MARK L. SHURTLEFF, USB #4666  
Utah Attorney General  
160 East 300 South, 5th Floor  
Salt Lake City, UT 84114  
Telephone: (801) 366-0290  
Facsimile: (801) 366-0292  
Attorney for Respondent Utah Air Quality Board

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**IN THE UTAH COURT OF APPEALS**

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**Utah Chapter of the Sierra Club,**  
a non-profit organization, and  
**Grand Canyon Trust,** a non-profit  
organization,

Petitioners,

v.

**Utah Air Quality Board,** an agency of the  
State of Utah,

Respondent.

**UTAH AIR QUALITY BOARD'S RESPONSE  
TO SIERRA CLUB'S MOTION TO  
SUPPLEMENT RECORD**

Appeal No. 20050455

Agency Decision: Order Re Petitions to  
Intervene in the Matter of Sevier Power  
Company Power Plant

COMES NOW the Utah Air Quality Board (Board), by and through undersigned counsel, and hereby responds to Sierra Club's and Grand Canyon Trust's ("Sierra Club") Motion to Supplement Record and Supporting Memorandum. The Board responds that a full and complete record of the Utah Air Quality Board in this matter has been prepared and indexed as required by the rules of the Court. The Board opposes Sierra Club's Motion to Supplement the Record for the reason that the decision of the Board being appealed regarding intervention should be reviewed on the record that was before the Board, and should not be reviewed by considering documents and information that were not presented to or reviewed by the Board. Accordingly,

the Board respectfully requests that the Court deny Sierra Club's Motion to Supplement the Record.

On June 6, 2005, counsel for the Utah Air Quality Board filed a Record Index in this case. On June 23, 2005, counsel for the Utah Air Quality Board filed a revised Record Index adding additional documents presented to the Utah Air Quality Board after the June 6, 2005, date. The revised Record Index contains a listing of all documents of the Utah Air Quality Board in this matter. Mr. Fred Nelson, as counsel to the Board, certified to that fact, as required by this Court's rules. Sierra Club made a request that the additional documents listed in its Motion to Supplement the Record be included in the revised Record Index. Mr. Nelson sent a letter to Sierra Club dated June 23, 2005 advising the Sierra Club why the additional documents requested by the Sierra Club were not included in the record (see attached Exhibit 1).

Utah Rules of Appellate Procedure, Rule 11(d)(3) requires that the agency "shall include all papers in the agency file as part of the record." The "agency" is the Utah Air Quality Board. The Utah Air Quality Board is the "agency" whose decision is being appealed. The documents requested by the Sierra Club to be added to the record are not documents in the files of the Utah Air Quality Board but are documents in the files of the Executive Secretary and the Utah Division of Air Quality. Parts of those documents may have been referenced in participants' pleadings before the Board, but none of the documents listed by the Sierra Club were presented to or reviewed by the Utah Air Quality Board in making its decisions in this matter.

Sierra Club considers the term "agency" as used in the rules of this Court to encompass not only the record of the Utah Air Quality Board but also the files of the Utah Division of Air Quality and the Executive Secretary. These entities are separate and distinct agencies. The Utah Air Quality Board is established under U.C.A. § 19-1-106 and is composed of 11 members (see

U.C.A. § 19-2-103). The Utah Division of Air Quality is established under a separate section of the statute, U.C.A. § 19-1-105, and is the agency responsible for day-to-day administration of the rules and programs established by the Utah Air Quality Board. The Executive Secretary is not a member of the Board but is appointed by the Executive Director of the Utah Department of Environmental Quality, with the approval of the Board, and serves under the administrative direction of the Executive Director of the Department of Environmental Quality (U.C.A. § 19-2-107(1)).

Utah law charges the Executive Secretary with the responsibility for issuance of approval orders and permits (U.C.A. § 19-2-107). The Executive Secretary does so through using employees of the Utah Division of Air Quality to review and issue approval orders and permits. Appeals of decisions of the Executive Secretary are made to the Utah Air Quality Board (U.C.A. § 19-2-108(3)). The documents and records of the Executive Secretary and the Utah Division of Air Quality are not records of the Utah Air Quality Board. The Board is the adjudicative body that hears appeals and only considers the documents and evidence that it receives as part of the adjudicative process. The file of the Utah Air Quality Board in this matter was initiated when the Sevier Citizens Group and Sierra Club filed Requests for Agency Action in early November, 2004.

To date, the Sierra Club or any other party has not presented the documents listed by the Sierra Club to the Board for review or consideration in making its decisions. The Board operates under a set of administrative rules that requires, for appeals of approval orders and permits, that evidence and documents be presented through a formal proceeding (Utah Admin. Code R307-103-2 and R307-103-4). The requirements of the Utah Administrative Procedures Act for formal proceedings (U.C.A. § 63-46b-8) are applicable and include evidentiary requirements and



procedures. The documents requested by the Sierra Club to be part of the record have not been presented to the Utah Air Quality Board, have not been received into evidence by the Board, and, at this point in time do not constitute a part of the record of the Board. For the convenience of the Court, Exhibit 2 is a copy of the administrative procedure rules of the Board.

Sierra Club refers in correspondence to the "Board's permit file." There is no Board permit file. There is a permit file in the Division of Air Quality. Sierra Club incorrectly assumes that all documents of the Division of Air Quality pertaining to this matter have become part of the record of the Board by virtue of its appeal. Under the rules of the Board (Utah Admin. Code R307-103-7(5)) at least 15 days prior to the scheduled hearing, the Executive Secretary is required to compile a list of pre-hearing documents to which each party may object or propose supplementation. The pre-hearing documents would ordinarily include "pertinent permit application" documents (Utah Admin. Code R307-103-7(5)). Documents that all parties agree should be part of the record of the Board are submitted. The Board would have to make a ruling on inclusion of contested documents. That process has not yet occurred in the Board's hearing of the merits of the appeals. While it is likely that had issues raised by the Sierra Club proceeded to a hearing on the merits, the Board would have been presented with the documents listed by the Sierra Club, the fact remains that the Board has not received into evidence any of the documents listed by the Sierra Club in its Motion to Supplement the record.

Sierra Club refers in its Motion to the fact that the Board has designated a "standing file." There has been no such designation by the Board. The revised record on appeal includes all documents that are part of the Board's file.


Sierra Club argues that because it cited to the documents in its pleadings before the Board, the documents themselves become part of the record on appeal. No rule of evidence

allows a party to simply cite to a document (without presenting a copy of the document to the Board) with the result that the document in total is thereby entered into evidence and becomes part of the record. In any event, in the present case, the Board did not see or review the documents listed by the Sierra Club in its Motion to Supplement; it only reviewed the language in the participants' pleadings referencing those documents.

Rule 11 of the Utah Rules of Appellate Procedure allows supplementing the record when there is an omission or exclusion, or a dispute as to the accuracy of reporting, but not to introduce new material into the record. State v. Law, 2003 UT App 228, 75 P.3d 923 and Olson v. Park-Craig-Olson, Inc., 815 P.2d 1356, 1359 (Utah App. 1991).

Accordingly, the Board respectfully requests that the Court deny Sierra Club's Motion to Supplement the Record.

Dated this 2<sup>nd</sup> day of August, 2005.

  
\_\_\_\_\_  
FRED G NELSON  
Attorney for the Utah Air Quality Board

STATE OF UTAH  
OFFICE OF THE ATTORNEY GENERAL

EXHIBIT 1



MARK L. SHURTLEFF  
ATTORNEY GENERAL

RAYMOND A. HINTZE  
Chief Deputy

*Protecting Utah • Protecting You*

KIRK TORGENSEN  
Chief Deputy

June 23, 2005

Joro Walker  
Western Resource Advocates  
1473 S 1100 E Suite F  
Salt Lake City, Utah 84105

Dear Joro:

Enclosed please find a Revised Record Index for both the IPP Unit 3 Appeal (No. 20050454) and the Sevier Power Appeal (No. 200050455).

I included all documents that the Utah Air Quality Board reviewed as part of its decisions as well as the transcripts of the hearings. I did not include the additional documents from the Division of Air Quality files that you requested in your letters dated June 10, 2005, and June 16, 2005, because the Board did not review those documents in reaching its decisions. Those documents are currently not part of the record of the Board. It is recognized that in hearing the administrative appeals, an administrative record of the permitting actions will need to be assembled, but at this point, the administrative record has not yet been provided to the Board. Further, the inclusion of additional documents that were not before the Board in making its decisions appears to be a contested matter. Should you decide to pursue this matter, you may need to make a request to the Court of Appeals to supplement the record.

Sincerely,

Fred G Nelson  
Assistant Attorney General  
Counsel for Utah Air Quality Board



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GO

**Division of Administrative Rules**

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As in effect on May 1, 2005

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**R307-103-1. Scope of Rule.**

(1) This rule R307-103 sets out procedures for conducting adjudicative proceedings under Title 19, Chapter 2, Utah Air Conservation Act, and governed by Title 63, Chapter 46b, the Utah Administrative Procedures Act.

(2) The executive secretary may issue initial orders or notices of violation as authorized by the Board. Following the issuance of an initial order or notice of violation under Title 19, Chapter 2, the recipient, or in some situations other persons, may contest that order or notice in a proceeding before the board or before a presiding officer appointed by the board.

(3) Issuance of initial orders and notices of violation are not governed by the Utah Administrative Procedures Act as provided under 63-46b-1(2)(k) and are not governed by R307-103-3 through R307-103-14 of this Rule. Initial orders and notices of violation are further described in R307-103-2(1).

(4) Proceedings to contest an initial order or notice of violation are governed by the Utah Administrative Procedures Act and by this rule R307-103.

(5) The Utah Administrative Procedures Act and this rule R307-103 also govern any other formal adjudicative proceeding before the Air Quality Board.

**R307-103-2. Initial Proceedings.**

(1) Initial Proceedings Exempt from Utah Administrative Procedures Act. Initial orders and notices of violation include, but are not limited to, initial proceedings regarding:

- (a) approval, denial, termination, modification, revocation, reissuance or renewal of permits, plans, or approval orders;
- (b) notices of violation and orders associated with notices of violation;
- (c) orders to comply and orders to cease and desist;
- (d) certification for tank vapor tightness testing under R307-342;
- (e) certification of asbestos contractors under R307-801;
- (f) fees imposed for major source reviews under R307-414;
- (g) assessment of other fees except as provided in R307-103-14(7);
- (h) eligibility of pollution control equipment for tax exemptions under R307-120, R307-121, and R307-122;
- (i) requests for variances, exemptions, and other approvals;
- (j) requests or approvals for experiments, testing or control plans; and
- (k) certification of individuals and firms who perform lead-based paint activities and accreditation of lead-based paint training providers under R307-840.

**(2) Effect of Initial Orders and Notices of Violation.**

(a) Unless otherwise stated, all initial orders or notices of violation are effective upon issuance. All initial orders or notices of violation shall become final if not contested within 30 days after the date issued.

(b) The date of issuance of an initial order or notice of violation is the date the initial order or notice of violation is mailed.

(c) Failure to timely contest an initial order or notice of violation waives any right of administrative contest, reconsideration, review, or judicial appeal.

**R307-103-3. Contesting an Initial Order or Notice of Violation.**

(1) Procedure. Initial orders and notices of violation, as described in R307-103-2(1), may be contested by filing a written Request for Agency Action to the Executive Secretary, Air Quality Board, Division of Air Quality, PO Box 144820, Salt Lake City, Utah 84114-4820.

(2) Content Required and Deadline for Request. Any such request is governed by and shall comply with the requirements of 63-46b-3(3). If a request for agency action is made by a person other than the recipient of an order or notice of violation, the request for agency action shall also specify in writing sufficient facts to allow the board to determine whether the person has standing under R307-103-6(3) to bring the requested action.

(3) A request for agency action made to contest an initial order or notice of violation shall, to be timely, be received for filing within 30 days of the issuance of the initial order or notice of violation.

(4) Stipulation for Extending Time to File Request. The executive secretary and the recipient of an initial order or notice of violation may stipulate to an extension of time for filing the request, or any part thereof.

**R307-103-4. Designation of Proceedings as Formal or Informal.**

(1) Contest of an initial order or notice of violation resulting from proceedings described in R307-103-2(1) shall be conducted as a formal proceeding.

(2) The board in accordance with 63-46b-4(3) may convert proceedings which are designated to be formal to informal and proceedings which are designated as informal to formal if conversion is in the public interest and rights of all parties are not unfairly prejudiced.

**R307-103-5. Notice of and Response to Request for Agency Action.**

(1) The presiding officer shall promptly review a request for agency action and shall issue a Notice of Request for Agency Action in accordance with 63-46b-3(3)(d) and (e). If further proceedings are required and the matter is not set for hearing at the time the Notice is issued, notice of the time and place for a hearing shall be provided promptly after the hearing is scheduled.

(2) The Notice shall include a designation of parties under R307-103-6(4), and shall notify respondents that any response to the Request for Agency Action shall be due within 30 days of the day the Notice is mailed, in accordance with 63-46b-6.

**R307-103-6. Parties and Intervention.**

(1) Determination of a Party. The following persons are parties to an adjudicative proceeding:

(a) The person to whom an initial order or notice of violation is directed, such as a person who submitted a permit application that was approved or disapproved by initial order of the executive secretary;

(b) The executive secretary of the board;

(c) All persons to whom the board has granted intervention under R307-103-6(2); and

(d) Any other person with standing who brings a Request for Agency Action as authorized by the Utah Administrative Procedures Act and these rules.

(2) Intervention.

(a) A Petition to Intervene shall meet the requirements of 63-46b-9. Except as provided in (2)(c), the timeliness of a Petition to Intervene shall be determined by the presiding officer under the facts and circumstances of each case.

(b) Any response to a Petition to Intervene shall be filed within 20 days of the date the Petition was filed, except as provided in R307-103-6(2)(c).

(c) A person seeking to intervene in a proceeding for which agency action has not been initiated under 63-46b-3 may file a Request for Agency Action at the same time he files a Petition for Intervention. Any such Request for Agency Action and Petition to Intervene must be received by the board for filing within 30 days of the issuance of the initial order or notice of violation being challenged. The time for filing a Request for Agency Action and Petition to Intervene may be extended by stipulation of the executive secretary, the person subject to an initial order or notice of violation, and the potential intervenor.

(d) Any response to a Petition to Intervene that is filed at the same time as a Request for Agency Action shall be filed on or before the day the response to the Request for Agency Action is due.

(e) A Petition to Intervene shall be granted if the requirements of 63-46b-9(2) are met.

(3) Standing. No person may initiate or intervene in an agency action unless that person has standing. Standing shall be evaluated using applicable Utah case law.

(4) Designation of Parties. The presiding officer shall designate each party as a petitioner or respondent.

(5) Amicus Curiae (Friend of the Court). A person may be permitted by the presiding officer to enter an appearance as amicus curiae (friend of the court), subject to conditions established by the presiding officer.

#### **R307-103-7. Conduct of Proceedings.**

##### **(1) Role of Board.**

(a) The board is the "agency head" as that term is used in Title 63, Chapter 46b. The board is also the "presiding officer," as that term is used in Title 63, Chapter 46b, except:

(i) The chair of the board shall be considered the presiding officer to the extent that these rules allow; and

(ii) The board may appoint one or more presiding officers to preside over all or a portion of the proceedings.

(b) The chair of the board may delegate the chair's authority as specified in this rule to another board member.

(2) Appointed Presiding Officers. Unless otherwise explicitly provided by written order, any appointment of a presiding officer shall be for the purpose of conducting all aspects of an adjudicative proceeding, except rulings on intervention, stays of orders, dispositive motions, and issuance of the final order. As used in this rule, the term "presiding officer" shall mean "presiding officers" if more than one presiding officer is appointed by the board.

(3) Board Counsel. The Presiding Officer may request that Board Counsel provide legal advice regarding legal procedures, pending motions, evidentiary matters and other legal issues.

(4) Pre-hearing Conferences. The presiding officer may direct the parties to appear at a specified time and place for pre-hearing conferences for the purposes of establishing schedules, clarifying the issues, simplifying the evidence, facilitating discovery, expediting proceedings, encouraging settlement, or giving the parties notice of the presiding officer's availability to parties.

##### **(5) Pre-hearing Documents.**

(a) At least 15 business days before a scheduled hearing, the executive secretary shall compile a draft list of prehearing documents as described in (b), and shall provide the list to all other parties. Each party may propose to add documents to or delete document from the list. At least seven business days before a scheduled hearing, the executive secretary shall issue a final prehearing document list, which shall include only those documents upon which all parties agree unless otherwise ordered by the presiding officer. All documents on the final prehearing document list shall be made available to the presiding officer prior to the hearing, and shall be deemed to be authenticated.

(b) The prehearing document list shall ordinarily include any pertinent permit application, any pertinent inspection report, any pertinent draft document that was released for public comment, any pertinent public comments received, any pertinent initial order or notice of violation, the request for or notice of agency action, and any responsive pleading. The list is not intended to be an exhaustive list of every document relevant to the proceeding, however any document may be included upon the agreement of all parties.

##### **(6) Briefs.**

(a) Unless otherwise directed by the presiding officer, parties to the proceeding shall submit a pre-hearing brief, which shall include a proposed order meeting the requirements of 63-46b-10, at least seven business days before the hearing. The prehearing brief shall be limited to 20 pages exclusive of the proposed order.

(b) Post-hearing briefs and responsive briefs will be allowed only as authorized by the presiding

officer.

**(7) Schedules.**

(a) The parties are encouraged to prepare a joint proposed schedule for discovery, for other pre-hearing proceedings, for the hearing, and for any post-hearing proceedings. If the parties cannot agree on a joint proposed schedule, any party may submit a proposed schedule to the presiding officer for consideration.

(b) The presiding officer shall establish a schedule for the matters described in (a) above.

(8) Motions. All motions shall be filed a minimum of 12 days before a scheduled hearing, unless otherwise directed by the presiding officer. A memorandum in opposition to a motion may be filed within 10 days of the filing of the motion, or at least one day before any scheduled hearing, whichever is earlier. Memoranda in support of or in opposition to motions may not exceed 15 pages unless otherwise provided by the presiding officer.

(9) Filing and Copies of Submissions. The original of any motion, brief, petition for intervention, or other submission shall be filed with the executive secretary. In addition, the submitter shall provide a copy to each presiding officer, to each party of record, and to all persons who have petitioned for intervention, but for whom intervention has been neither granted nor denied.

**R307-103-8. Hearings.**

The presiding officer shall govern the conduct of a hearing, and may establish reasonable limits on the length of witness testimony, cross-examination, oral arguments or opening and closing statements.

**R307-103-9. Orders.**

**(1) Recommended Orders of Appointed Presiding Officers.**

(a) Unless an appointed presiding officer is required by the terms of his appointment to issue a final order, he shall prepare a recommended order for the board, and shall provide copies of the recommended order to the board and to all parties.

(b) Any party may, within 10 days of the date the recommended order is mailed, delivered, or published, comment on the recommended order. Such comments shall be limited to 15 pages and shall cite to the specific parts of the record which support the comments.

(c) The board shall review the recommended order, comments on the recommended order, and those specific parts of the record cited by the parties in any comments. The board shall then determine whether to accept, reject, or modify the recommended order. The board may remand part or all of the matter to the presiding officer or may itself act as presiding officers for further proceedings.

(d) The board may modify this procedure with notice to all parties.

(2) Final Orders. The board shall issue a final order which shall include the information required by 63-46b-10 or 63-46b-5(1)(i).

**R307-103-10. Stays of Orders.**

**(1) Stay of Orders Pending Administrative Adjudication.**

(a) A party seeking a stay of a challenged order during an adjudicative proceeding shall file a motion with the board. If granted, a stay would suspend the challenged order for the period as directed by the board.



(b) The board may order a stay of the order if the party seeking the stay demonstrates the following:

- (i) The party seeking the stay will suffer irreparable harm unless the stay is issued;
- (ii) The threatened injury to the party seeking the stay outweighs whatever damage the proposed stay is likely to cause the party restrained or enjoined;
- (iii) The stay, if issued, would not be adverse to the public interest; and
- (iv) There is substantial likelihood that the party seeking the stay will prevail on the merits of the underlying claim, or the case presents serious issues on the merits which should be the subject of further adjudication.

**(2) Stay of the Order Pending Judicial Review.**

(a) A party seeking a stay of the board's final order during the pendency of judicial review shall file a motion with the board.

(b) The board as presiding officer may grant a stay of its order during the pendency of judicial review if the standards of R307-103-10(1)(b) are met.

**R307-103-11. Reconsideration.**

No agency review under 63-46b-12 is available. A party may request reconsideration of an order of the presiding officer as provided in 63-46b-13.

**R307-103-12. Disqualification of Board Members or Other Presiding Officers.**

**(1) Disqualification of Board Members or Other Presiding Officers.**

(a) A member of the board or other presiding officer shall disqualify himself from performing the functions of the presiding officer regarding any matter in which he, or his spouse, or a person within the third degree of relationship to either of them, or the spouse of such person:

- (i) Is a party to the proceeding, or an officer, director, or trustee of a party;
- (ii) Has acted as an attorney in the proceeding or served as an attorney for, or otherwise represented a party concerning the matter in controversy;
- (iii) Knows that he has a financial interest, either individually or as a fiduciary, in the subject matter in controversy or in a party to the proceeding;
- (iv) Knows that he has any other interest that could be substantially affected by the outcome of the proceeding; or
- (v) Is likely to be a material witness in the proceeding.

(b) A member of the board or other presiding officer is also subject to disqualification under principles of due process and administrative law.

(c) These requirements are in addition to any requirements under the Utah Public Officers' and Employees' Ethics Act, Utah Code Ann. Section 67-16-1 et seq.

(2) **Motions for Disqualification.** A motion for disqualification shall be made first to the presiding officer. If the presiding officer is appointed, any determination of the presiding officer upon a motion for disqualification may be appealed to the board.

**R307-103-13. Declaratory Orders.**

(1) A request for a declaratory order may be filed in accordance with the provisions of 63-46b-21. The request shall be titled a petition for declaratory order and shall meet the requirements of 63-46b-3(3). The request shall also set out a proposed order.

(2) Requests for declaratory order, if set for adjudicative hearing, will be conducted using formal procedures unless converted to an informal proceeding under R307-103-4(2) above.

(3) The provisions of 63-46b-4 through 63-46b-13 apply to declaratory proceedings, as do the provisions of this Rule R307-103.

#### R307-103-14. Miscellaneous.

(1) Modifying Requirements of Rules. For good cause, the requirements of these rules may be modified by order of the presiding officer.

(2) Extensions of Time. Except as otherwise provided by statute, the presiding officer may approve extensions of any time limits established by this rule, and may extend time limits adopted in schedules established under R307-103-7(6). The presiding officer may also postpone hearings. The chair of the board may act as presiding officer for purposes of this paragraph.

(3) Computation of Time. Time shall be computed as provided in Rule 6(a) of the Utah Rules of Civil Procedure except that no additional time shall be allowed for service by mail.

(4) Appearances and Representation.

(a) An individual who is a participant to a proceeding, or an officer designated by a partnership, corporation, association, or governmental entity which is a participant to a proceeding, may represent his, her, or its interest in the proceeding.

(b) Any participant may be represented by legal counsel.

(5) Other Forms of Address. Nothing in these rules shall prevent any person from requesting an opportunity to address the board as a member of the public, rather than as a party. An opportunity to address the board shall be granted at the discretion of the board. Addressing the board in this manner does not constitute a request for agency action under R307-103-3.

(6) Settlement. A settlement may be through an administrative order or through a proposed judicial consent decree, subject to the agreement of the settlers.

(7) Requests for Records. Requests for records and related assessments of fees for records under the Title 63, Chapter 2, Utah Government Record Access and Management Act, are not governed by Title 63, Chapter 46b, Utah Administrative Procedures Act, or by this rule.

#### KEY

air pollution, administrative procedure, hearings\*

#### Date of Enactment or Last Substantive Amendment

April 12, 2001

#### Authorizing, Implemented, or Interpreted Law

63-46b

Rule converted into HTML by the Division of Administrative Rules.

For questions regarding the *content* or *application* of rules under Title R307, please contact the

promulgating agency (Environmental Quality, Air Quality). A list of agencies with links to their homepages is available at <http://www.utah.gov/government/agencylist.html>.

For questions about the *rulemaking process*, please contact the Division of Administrative Rules. *Please Note:* The Division of Administrative Rules is **not able** to answer questions about the content or application of these rules.

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CERTIFICATE OF SERVICE

I hereby certify that on this 2nd day of August, 2005, I caused a copy of the foregoing Utah Air Quality Board's Response to Sierra Club's Motion to Supplement Record to be mailed by United States Mail, postage prepaid, to the following:

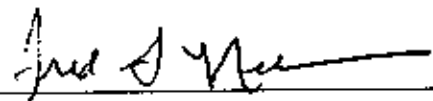
Joro Walker  
Sean Phelan  
Western Resource Advocates  
425 East 100 South  
Salt Lake City, UT 84111

Richard Rathbun  
Assistant Attorney General  
160 East 300 South, 5th Floor  
Salt Lake City, UT 84114

Christian Stephens  
Assistant Attorney General  
Utah Division of Air Quality  
150 North 1950 West  
Salt Lake City, Utah 84114

James Kennon  
Sevier County Citizens  
for Clean Air and Water  
146 North Main Street, Suite 27  
PO Box 182  
Richfield, Utah 84701

Fred Finlinson  
Finlinson & Finlinson  
11955 Lehi-Fairfield Rd.  
Saratoga Springs, UT 84043

  
\_\_\_\_\_  
Fred G. Nelson  
Assistant Attorney General

P M Standard



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
*Executive Director*

DIVISION OF AIR QUALITY  
Richard W. Sprott  
*Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

DAQ-061-2005

**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Rick Sprott, Executive Secretary

**FROM:** Mat Carlile, Environmental Scientist

**DATE:** 08/16/2005

**SUBJECT:** PM Standards Modification Update.

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**Background**

The Clean Air Act (42 U.S.C. 7409 (b)(2)(d)(1)) requires the EPA to complete a thorough review of the National Ambient Air Quality Standards (NAAQS) at least every five years. Particulate Matter (PM) standards were last reviewed in 1997. The EPA is under court order to complete its review of the PM NAAQS by December 20, 2005 and have a final rule by September 27, 2006.

This review started with a review of the latest scientific and technical information about PM. This Criteria Document was completed in October 2004. The next step in the process is Environmental Protection Agency (EPA) staff's assessment of the policy implications of the latest scientific and technical information about PM. This staff paper was completed in June 2005 and recommended two alternative approaches to establishing 24-hour and annual PM<sub>2.5</sub> standards (see **Attachment 1** for more information about the EPA staff paper). The Clean Air Scientific Advisory Committee (CASAC) reviews the staff paper and gives its recommendations. CASAC sent a letter to EPA Administrator on June 6, 2005, recommending that the primary PM<sub>2.5</sub> 24-hour and annual NAAQS should be modified. The Administrator will consider the information in the staff paper, the CASAC letter, and public comments in reaching decisions regarding the PM standards. Historically, the Administrator has adopted the recommendation of CASAC.

The following table summarizes the recommendation for the PM<sub>2.5</sub> NAAQS from the staff paper and CASAC letters.

|                                | 24-hour   | Annual   |
|--------------------------------|---|--|
| Current                        | 65 $\mu\text{g}/\text{m}^3$ (98th percentile form)                        | 15 $\mu\text{g}/\text{m}^3$ (three year weighted annual averages)    |
| EPA Staff Paper Alternative #1 | 30-40 $\mu\text{g}/\text{m}^3$ (98th or 99 percentile form <sup>1</sup> ) | 12-14 $\mu\text{g}/\text{m}^3$ (three year weighted annual averages) |
| EPA Staff Paper Alternative #2 | 25-35 $\mu\text{g}/\text{m}^3$ (98th or 99 percentile form <sup>1</sup> ) | 15 $\mu\text{g}/\text{m}^3$ (three year weighted annual averages)    |
| CASAC                          | 30-35 $\mu\text{g}/\text{m}^3$ (98th percentile form)                     | 13-14 $\mu\text{g}/\text{m}^3$ (three year weighted annual averages) |

### Implication of New PM<sub>2.5</sub> Standards

I have reviewed the monitoring data from our existing PM<sub>2.5</sub> monitoring network to determine the impact of these recommended changes, looking specifically at our data from 2002 through 2004. For example, if the EPA were to adopt a new 24-hour standard at 40  $\mu\text{g}/\text{m}^3$  based on a 98<sup>th</sup> percentile, I determined that 11 out of the 14 monitors in Utah would have violated this new standard during that period. EPA is also considering changing the form of the standard to the 99<sup>th</sup> percentile. Any standard equal to or less than 40  $\mu\text{g}/\text{m}^3$  based on a 99<sup>th</sup> percentile would have caused the entire monitoring network to violate the standard. CASAC recommends retaining the 98<sup>th</sup> percentile. Further, I determined that one monitor would have a violation if the annual standard were to drop to 14  $\mu\text{g}/\text{m}^3$ .

The following table summarizes how these modifications to the NAAQS could impact Utah's PM<sub>2.5</sub> attainment status at our current monitors based on data from 2002 through 2004. An "X" indicates that there would have been a violation of the NAAQS had the recommended standard been in place.

<sup>1</sup> Based on a 98th percentile form for a standard set at the middle to lower end of this range, or a 99th percentile form for a standard set at the middle to upper end of this range.

|    | Monitor                | Recommended 24-Hour Standards <sup>2</sup> ( $\mu\text{g}/\text{m}^3$ ) |    |    |    | Recommended Annual Standards ( $\mu\text{g}/\text{m}^3$ ) <sup>3</sup> |    |    |
|----|------------------------|---|----|----|----|--|----|----|
|    |                        | 40  | 35 | 30 | 25 | 14   | 13 | 12 |
| PM | Brigham City           | X   | X  | X  | X  |  |    |    |
|    | Logan                  | X   | X  | X  | X  |  |    | X  |
|    | Bountiful <sup>4</sup> |   |    |    |    |  |    |    |
|    | Cottonwood             | X   | X  | X  | X  |  | X  | X  |
|    | N. Salt Lake           | X   | X  | X  | X  | X  | X  | X  |
|    | Hawthorne              | X   | X  | X  | X  |  |    | X  |
|    | Herriman               |   | X  | X  | X  |  |    |    |
|    | West Valley            | X   | X  | X  | X  |  |    | X  |
|    | N. Provo               | X   | X  | X  | X  |  |    |    |
|    | Lindon                 | X   | X  | X  | X  |  |    |    |
|    | Highland               |   |    | X  | X  |  |    |    |
|    | Spanish Fork           |   | X  | X  | X  |  |    |    |
|    | Ogden #2               | X   | X  | X  | X  |  |    | X  |
|    | Washington Terrace     | X   | X  | X  | X  |  |    |    |
|    | Harrisville            | X   | X  | X  | X  |  |    |    |

### Course

The staff paper also recommends that EPA replace the current  $\text{PM}_{10}$  standards with a standard for particles known as "thoracic coarse" particles. These particles are between 2.5 and 10 micrometers in diameter. EPA will need to develop a new monitoring methodology to measure  $\text{PM}_{2.5-10}$ . As an approximation,  $\text{PM}_{2.5}$  values were subtracted from  $\text{PM}_{10}$  values to determine the  $\text{PM}_{2.5-10}$  value. As can be seen from the attached graphs (**Attachment 2**), most of the PM during winter temperature inversions is in the  $\text{PM}_{2.5}$  fraction, while most of the PM in the summer (windblown dust) is in the  $\text{PM}_{2.5-10}$  fraction. The staff paper recommends a 24-hour standard in the range of 50 to 70  $\mu\text{g}/\text{m}^3$ , with a 98<sup>th</sup> percentile form, or in the range of 60 to 85  $\mu\text{g}/\text{m}^3$ , with a 99<sup>th</sup> percentile form. From my preliminary review of our data, it does not appear that we will violate the new  $\text{PM}_{2.5-10}$  standard.

The staff paper also recommends that the  $\text{PM}_{2.5-10}$  standard focus on coarse particles generally present in urban environments, which are supposedly more toxic. The State of Utah will need to work closely with EPA to ensure that its definition of urban areas makes sense in the West.

<sup>2</sup>  $\text{PM}_{2.5}$  values based on 2002-2004 24-hour average, calculated from 98<sup>th</sup> percentile values obtained from EPA/AQS Quicklook reports. This is table reviews the new standard based on the 98<sup>th</sup> percentile because any standard equal to or less than 40  $\mu\text{g}/\text{m}^3$  based on a 99<sup>th</sup> percentile would have caused the entire monitoring network to violate the standard.

<sup>3</sup>  $\text{PM}_{2.5}$  values based on 2002-2004 annual average, calculated from weighted annual averages obtained from EPA/AQS Quicklook Reports.

<sup>4</sup> We did not have a full three years to determine averages for this site. However, it appears that this site would probably have violated the 24-hour standard if established at 40  $\mu\text{g}/\text{m}^3$ , and probably would not have violated any of the new annual standards.



Nationally, EPA has used counties and MSA's to define an urban area. This type of definition does not make a lot of sense for States that have large counties such as Utah.

### **Visibility Standard**

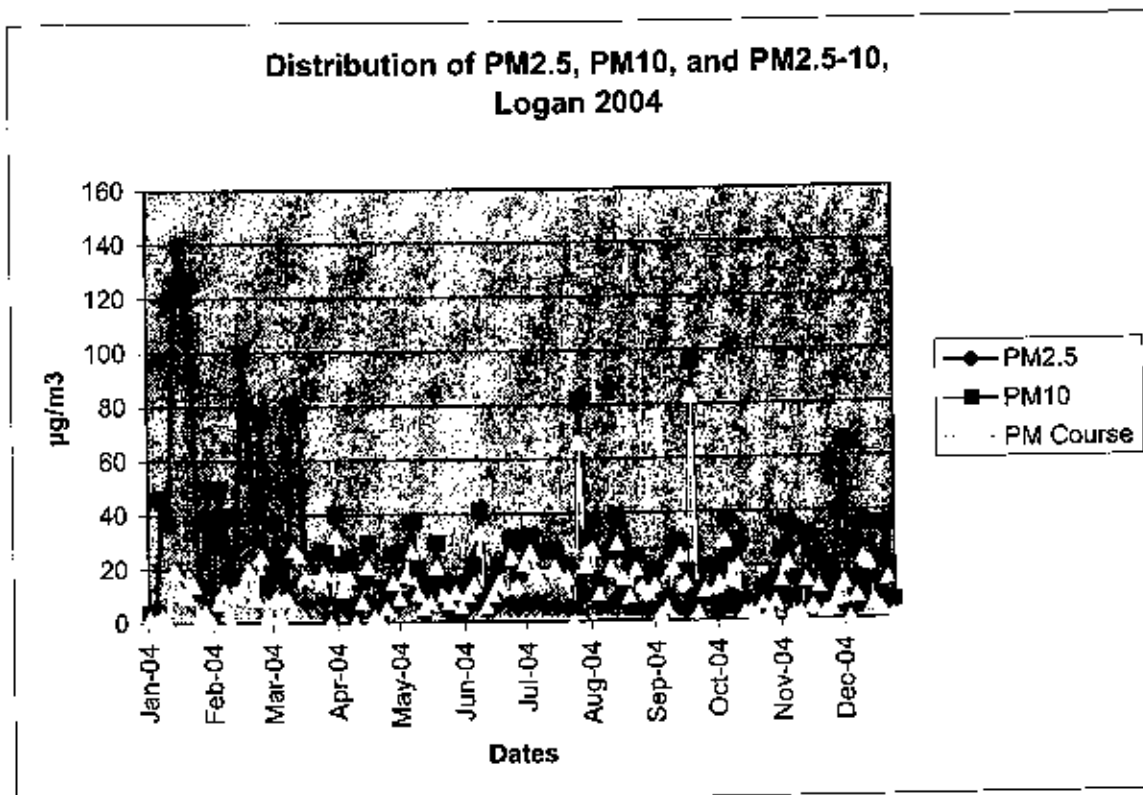
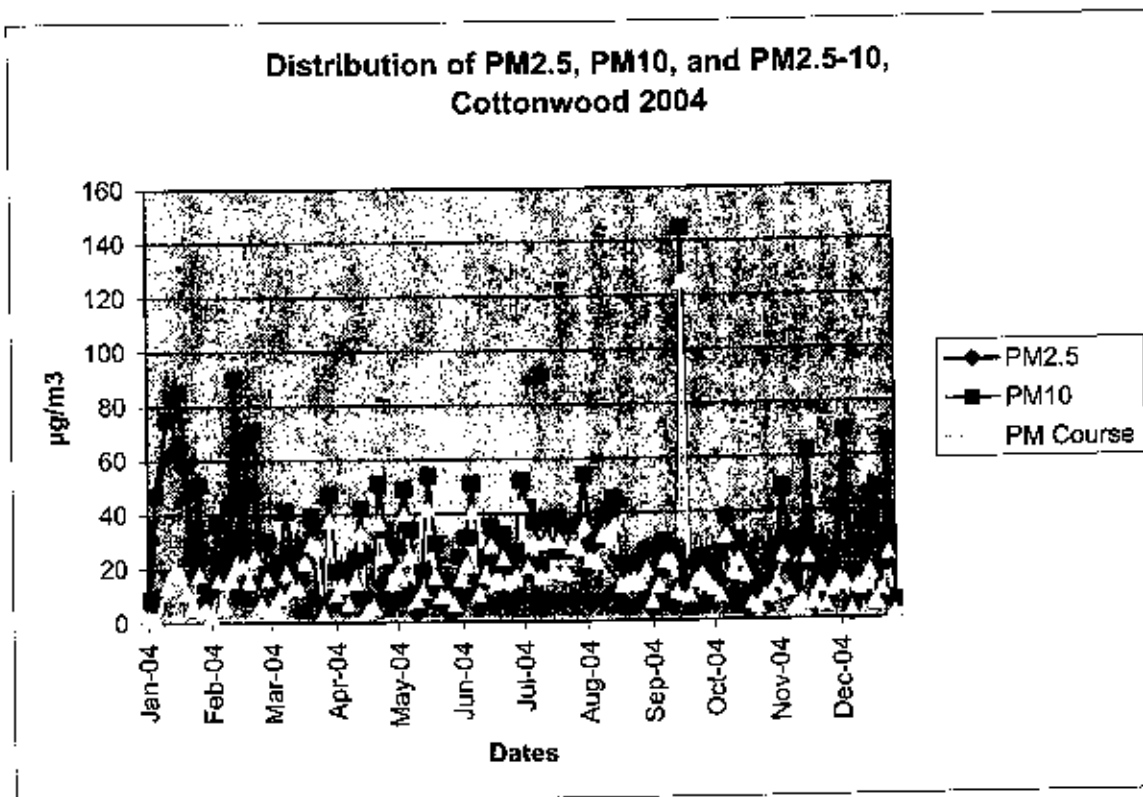
In addition to health protective standards, the EPA sets secondary standards to protect against ecological and other welfare effects of air pollution. The staff paper recommends revising the secondary standards for  $PM_{2.5}$  to provide increased and more targeted protection primarily in urban areas from visibility impairment related to fine particles. The staff paper recommends a 4 to 8 hour  $PM_{2.5}$  standard within the range of 20 to  $30\mu g/m^3$ , depending on the form of the standard. The staff paper suggests a range from the 92<sup>nd</sup> to the 98<sup>th</sup> percentile of the annual distribution of daily short-term  $PM_{2.5}$  concentrations, averaged over 3 years. It is very difficult to determine the impact of this new standard.

### **Attachments:**

Attachment 1: Final EPA Staff Paper for Particulate Matter Fact Sheet

Attachment 2: Graph of Distribution of  $PM_{2.5}$ ,  $PM_{10}$ , and  $PM_{2.5-10}$  for Cottonwood and Logan 2004.

Attachment 2: Graph of Distribution of PM2.5, PM10, and PM2.5-10 for Cottonwood and Logan 2004.





## **Review of the National Ambient Air Quality**

### **Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information**

#### **OAQPS Final Staff Paper for Particulate Matter Fact Sheet**

**June 30, 2005**

## FINAL STAFF PAPER FOR PARTICULATE MATTER

### FACT SHEET

#### OVERVIEW

- On June 30, 2005, the Environmental Protection Agency (EPA) released its staff's assessment of the policy implications of the latest scientific and technical information about particulate matter, also called "PM" or "particle pollution." The final staff paper for particulate matter is posted at [http://www.epa.gov/ttn/naags/standards/pm/s\\_pm\\_cr\\_sp.html](http://www.epa.gov/ttn/naags/standards/pm/s_pm_cr_sp.html)
- The document, known as a "staff paper," is part of EPA's regular review of its National Ambient Air Quality Standards for particulate matter. The assessment, conclusions, and recommendations are staff judgments and they do not represent Agency decisions on the PM standards.
- The staff paper concludes that the latest scientific, health and technical information about particle pollution supports improving EPA's current health-based standards for fine particles. It also recommends two approaches for establishing more protective fine particle standards.
- The staff paper also recommends that EPA replace the current PM<sub>10</sub> standards with a new health-based standard for particles known as "thoracic coarse" particles – particles between 2.5 and 10 micrometers in diameter that can reach deep parts of people's lungs. Staff also recommends such a standard focus on coarse particles generally present in urban environments, which are more toxic. This recommendation reflects the latest science about particle pollution.
- In addition to health protective standards, the Agency sets "secondary" standards to protect against ecological and other "welfare" effects of air pollution. The staff paper recommends revising the secondary standards for PM<sub>2.5</sub> to provide increased and more targeted protection primarily in urban areas from visibility impairment related to fine particles.
- The staff paper is based on the Agency's "criteria document" for particulate matter which was issued in final form in October 2004. The criteria document, prepared by EPA's Office of Research and Development, is a compilation and evaluation of the latest scientific knowledge useful in assessing the health and welfare effects of particulate matter pollution.
- Previous draft versions of the staff paper have been reviewed by the scientific community, industry, public interest groups, the general public, and the Clean Air Scientific Advisory Committee (CASAC). The most recent draft, completed in January 2005, was reviewed and discussed in public meetings of the CASAC in April and May.
- Earlier this month, the Clean Air Scientific Advisory Committee (CASAC) issued a letter to the administrator providing comments on the staff paper, as well as independent recommendations about improving EPA's particle pollution standards. Those recommendations were similar to those in the final staff paper. The CASAC's letter is

available at <http://www.epa.gov/sab/pdf/casac-05-007.pdf>

- The staff paper will be transmitted to EPA's Administrator, who is charged by law with deciding whether the particulate matter standards should be changed. The Administrator will consider the information in the Staff Paper, the CASAC letter, as well as public comments in reaching decisions regarding this standard review.
- Under a consent agreement with nine environmental groups, the Administrator must issue a proposal regarding the particulate matter standards by December 20, 2005, and a final rule by September 27, 2006. That rule may, or may not, include revisions to the standards.

#### KEY ELEMENTS OF THE PM STAFF PAPER

- The staff paper addresses both fine particles (those 2.5 micrometers in diameter and smaller) and thoracic or the "inhalable" portion of coarse particles (those between 2.5 and 10 micrometers in diameter). Particle standards are expressed in "micrograms per cubic meter air," which is a measure of particles found in the air.
- The staff paper also addresses both primary and secondary standards. *Primary standards* are designed to protect public health with an adequate margin of safety; *secondary standards* are designed to protect against "welfare effects" including ecological damage, visibility impairment (haze), and damage to materials.
- The staff paper includes the following staff judgments and conclusions about the existing particulate matter standards for fine and coarse particles:

##### Fine particles - primary standards

- PM<sub>2.5</sub> should continue to be used as the indicator for fine particles.
- Consideration should be given to revising the current PM<sub>2.5</sub> primary standards to provide increased public health protection from the effects of both long- and short-term exposures to fine particles in the ambient air. Staff provides two alternative approaches to establishing more protective suites of daily and annual PM<sub>2.5</sub> standards.
  - Retain annual standard at 15  $\mu\text{g}/\text{m}^3$ , together with a revised 24-hour PM<sub>2.5</sub> standard in the range of 35 to 25  $\mu\text{g}/\text{m}^3$  (based a 98<sup>th</sup> percentile form for a standard set at the middle to lower end of this range, or a 99<sup>th</sup> percentile form for a standard set at the middle to upper end of this range)
  - OR
  - Revise annual PM<sub>2.5</sub> standard, within the range of 14 to 12  $\mu\text{g}/\text{m}^3$ , together with a revised 24-hour PM<sub>2.5</sub> standard in the range of 30 to 40  $\mu\text{g}/\text{m}^3$ , with either the annual or the 24-hour standard, or both, at the middle to lower end of these ranges

#### Coarse particles - primary standards

- ▶ The current primary  $PM_{10}$  standards should be revised by replacing the  $PM_{10}$  indicator with an indicator of thoracic coarse particles generally found in urban areas that does not generally include fine particles. The recommended indicator includes particles larger than 2.5 micrometers but smaller than 10 micrometers, ( $PM_{10-2.5}$ ), with a focus on coarse particles that are generally present in urban environments, expressed as  $UPM_{10-2.5}$ .
- ▶ Staff recommends consideration of a 24-hour  $UPM_{10-2.5}$  standard with a level in the range of approximately 50 to 70  $\mu g/m^3$ , 98<sup>th</sup> percentile form, or approximately 60 to 85  $\mu g/m^3$ , 99<sup>th</sup> percentile form. The lower end reflects a more precautionary interpretation of the health effects information, while the upper end would provide protection that is approximately equivalent to that provided by the current  $PM_{10}$  standards.

#### Secondary standards

- ▶ For secondary standards, staff recommends that consideration be given to revising the current suite of secondary  $PM_{2.5}$  standards to provide increased and more targeted protection primarily in urban areas from visibility impairment related to fine particles.
- ▶ Staff recommends consideration of a 4- to 8-hour  $PM_{2.5}$  standard within the range of 30 to 20  $\mu g/m^3$ , depending on the form of the standard. Staff also recommends consideration of a percentile-based form for such a standard, focusing on a range from the 92<sup>th</sup> to the 98<sup>th</sup> percentile of the annual distribution of daily short-term  $PM_{2.5}$  concentrations, averaged over 3 years.

#### **NEXT STEPS**

- The Clean Air Scientific Advisory Committee intends to provide further advice to the EPA Administrator on a potential standard for inhalable coarse particles in another letter to be sent later this summer following their consideration of this issue in the final staff paper.
- Under terms of a consent decree, EPA will issue a proposal regarding the particulate matter standards review by December 20, 2005; and a final notice by September 27, 2006.

#### **ABOUT AIR QUALITY STANDARD REVIEWS**

- The Clean Air Act requires EPA to set national air quality standards for particulate matter and five other pollutants considered harmful to public health and the environment (the other pollutants are ozone, nitrogen oxides, carbon monoxide, sulfur dioxide and lead).
- The law also requires EPA to periodically review the standards to ensure that they provide adequate health and environmental protection, and to update those standards as necessary.

- Such a review is a lengthy undertaking. First, EPA's Office of Research and Development develops a "criteria document" a compilation and evaluation of the latest scientific knowledge useful in assessing the health and welfare effects of the air pollutant. In developing this document, EPA must consider the advice of the Clean Air Scientific Advisory Committee (CASAC).
- Based on the criteria document, EPA also develops a "staff paper" that helps translate the science into terms that can be used for making policy decisions. The staff paper, prepared by staff in EPA's Office of Air Quality Planning & Standards, includes recommendations to the EPA Administrator about any revisions to the standards needed to ensure that they protect public health with an adequate margin of safety, and that they protect the environment and the public welfare.
- Before either the criteria document or staff paper can be used as the basis for any policy decisions, they undergo rigorous review by the scientific community, industry, public interest groups, the general public and CASAC.
- Based on the scientific assessments in the criteria document and on the information and recommendations in the staff paper, the EPA Administrator determines whether it is appropriate to propose revisions to the standards.

#### **BACKGROUND -- 1997 REVISIONS TO PARTICULATE MATTER STANDARDS**

- The nation's air quality standards for particulate matter were first established in 1971 and were not significantly revised until 1987, when EPA changed the indicator of the standards to regulate inhalable particles smaller than, or equal to, 10 micrometers in diameter (that's about 1/4 the size of a single grain of table salt).
- Ten years later, after a lengthy review, EPA revised the PM standards, setting separate standards for fine particles (PM<sub>2.5</sub>) based on their link to serious health problems ranging from increased symptoms, hospital admissions and emergency room visits for people with heart and lung disease, to premature death in people with heart or lung disease.
- The 1997 standards also retained but slightly revised standards for PM<sub>10</sub> which were intended to regulate "inhalable coarse particles" that ranged from 2.5 to 10 micrometers in diameter. PM<sub>10</sub> measurements, however, contain both fine and coarse particles.
- A number of groups, including the American Trucking Association, sued EPA over the revised standards for particulate matter and the Agency's revised ozone standards. In May 1999, a panel of the U.S. Court of Appeals for the D.C. Circuit, in a split decision, held that the Clean Air Act -- as applied in setting the new public health air quality standards for ozone and particulate matter -- was unconstitutional as an improper delegation of legislative

authority to EPA.

- The Court of Appeals left the ozone and fine particle standards in place but ruled that EPA could not enforce them. However, the Court vacated the revisions to the  $PM_{10}$  standards, concluding that  $PM_{10}$  is not a good way to measure coarse particles because it includes fine particles.
- EPA appealed the Court's decision on the constitutional issues to the U.S. Supreme Court. In a landmark decision February 2001, the Supreme Court upheld EPA's authority to set national air quality standards that protect millions of people from the harmful effects of air pollution.
- The Supreme Court also affirmed that the Clean Air Act does not allow EPA to consider cost when setting national ambient air quality standards, but requires EPA to set those air quality standards at levels necessary to protect the public health with an adequate margin of safety and to protect public welfare from adverse effects.
- EPA did not appeal the Court of Appeals decision on the coarse particle standards. The Agency is addressing those standards as part of its current PM standards review.
- In March 2002, following the Supreme Court decision on the constitutional issues, the Court of Appeals rejected all remaining challenges to the 1997 standards. Thus, EPA is now moving forward to implement those standards to protect public health and welfare in a timely manner.



NSR Reform



State of Utah

Department of  
Environmental Quality

Dianne R. Nielson, Ph.D.  
Executive Director

DIVISION OF AIR QUALITY  
Richard W. Sprott  
Director

JON M. HUNTSMAN, JR.  
Governor

GARY HERBERT  
Lieutenant Governor

DAQ-060-2005

**MEMORANDUM**

**TO:** Air Quality Board

**THROUGH:** Richard Sprott, Executive Secretary

**FROM:** Colleen Delaney, Environmental Scientist

**DATE:** August 19, 2005

**SUBJECT:** NSR Reform Rule Update

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**NSR Reform Rule - PSD**

On December 31, 2002 the Environmental Protection Agency (EPA) published a major revision to the federal Prevention of Significant Deterioration (PSD) program that is commonly referred to as the New Source Review (NSR) Reform Rule. The NSR Reform Rule clarified when a modification should be considered a major modification, and provided more flexibility for certain types of changes. Large sources subject to the PSD rule are required to undergo intensive review prior to the issuance of a PSD permit. The PSD program requires extensive modeling and may require ambient monitoring to measure the impact of the new source. In addition, the PSD permit may not allow the air quality to degrade more than a specified increment from the baseline air quality. The major changes to the federal rule are summarized below.

1. **Applicability.** The NSR Reform Rule made several changes to the major modification applicability test for major sources. Under the new rule a major source can determine whether a physical or operational change at the plant is a major modification by comparing the actual emissions to projected actual emissions (future actual emissions) associated with the modification. The current rule requires the comparison of actual emissions to emissions at full capacity (potential to emit). The reform rule also, allows a source to use any two-year period within the last ten years to determine actual emissions.

2. Plantwide applicability limits (PAL). The rule allows a source to establish a plantwide emission cap based on actual emissions. The source can then make changes to the facility or individual emission units without requiring a PSD permit as long as emissions stay below the PAL.

3. Clean Units. This exclusion allows emission units at a source that meet pollution limits based on the installation of control equipment in accordance with BACT or LAER to make physical or operational changes to the unit without triggering NSR. The exclusion is only applicable if the changes to the emissions unit do not alter the physical or operational characteristics that formed the basis of the BACT or LAER determination.

4. Pollution control projects. Physical and operational changes with significant emission increases, which have a net environmental benefit, can be implemented without triggering NSR permitting requirements. Projects that have a major decrease in one pollutant but a corresponding but smaller collateral increase in another pollutant can be exempt from PSD review. EPA has listed a number of pre-approved PCP projects that a source can begin construction on immediately after notifying the regulatory agency. Projects not listed by EPA as environmentally beneficial, are required to get a preconstruction PCP exemption from the appropriate regulatory agency.

UDAQ has been working with stakeholders to determine the best approach for adopting the NSR reform provisions in Utah. UDAQ has drafted a rule change that would essentially incorporate the federal PSD rules by reference. This general approach seems to have a lot of support because it would be straightforward, and would be consistent with the programs adopted in other states. The PSD program would operate in conjunction with Utah's broader permitting program that requires BACT for all new or modified sources in the state.

### State of New York vs. EPA

The 2002 Federal NSR Reform rules were challenged for a variety of reasons by industry, a number of states (mostly in the northeast), and environmental groups. These challenges were consolidated into one petition (*State of New York vs. EPA*). The D.C. Circuit Court ruled on the consolidated NSR Reform petition June 24, 2005. The Court vacated the following provisions of the NSR Reform Rule:

1. The Clean Unit exemption
2. Pollution Control Projects (PCP)

In addition, the Court remanded the record keeping requirements for the Actual to Projected Actual test to EPA for further justification. It is important to note, however, that the Court upheld the major portions of the NSR Reform rule that address how to determine applicability for modifications and the use of plantwide applicability limits.

There have also been two other recent court cases, *EPA vs. Duke Energy Corporation*, June 15, 2005 and *EPA vs. Alabama Power*, June 10, 2005 that conflict with some of the decisions in the *State of New York vs. EPA* case regarding how to determine if a major modification has occurred

at a power plant. EPA is still trying to sort through these conflicting opinions and determine how to proceed. As a result of these recent decisions EPA may delay the submittal dates for NSR reform SIPs, and may also revise the federal regulations to address the Court's decision. EPA has not yet been able to give any clear guidance to states regarding how to proceed with adopting the NSR reform provisions.

### **Schedule**

UDAQ is required to submit its final NSR reform rule to EPA by January 2, 2006. UDAQ was on schedule to have the PSD portion of the NSR reform rule completed by that date. However, UDAQ will not be able to meet the EPA deadline because of the uncertainty caused by the recent Court decisions. We plan to move forward as soon as we receive guidance from EPA on either the PSD or non-attainment portions of the NSR reform rule. A schedule for how we intend to proceed with rule development is attached to this memorandum.

### **Nonattainment Area Permitting Rules**

The NSR reform provisions apply to both the PSD permitting program for attainment areas and the nonattainment NSR program for nonattainment areas. However, EPA has not yet promulgated changes to the federal nonattainment area permitting rules to address the 8-hour ozone and PM<sub>2.5</sub> standards (nor the 1990 Clean Air Act Amendments). UDAQ does not believe that it would be productive to implement the NSR Reform provisions without also addressing these standards. As a consequence of this delay, the rulemaking schedule for Utah's nonattainment area permitting rules is lagging behind the schedule for PSD. UDAQ intends to develop draft rule changes as quickly as possible when EPA finalizes the federal requirements. The schedule for rule development is attached to this memorandum.

### **Other Changes to Utah's Permitting Rules**

In addition to the NSR Reform Rule provisions, some provisions that are in Utah's current PSD rule need to be moved to the State Implementation Plan because the provisions are commitments by the State of Utah rather than enforceable rule requirements. These provisions include the process that the Board will follow to reclassify areas within the state for purposes of PSD, including consultation with the Governor and the Utah Legislature. A draft revision to the PSD SIP has been prepared to include these changes and to better describe the PSD permitting program.

UDAQ is also using this opportunity to make some changes to the overall permitting rules for Utah. A draft rule revision has been prepared that more clearly separates the federal major source permitting requirements from Utah's generally applicable permitting requirements. In addition, UDAQ has taken a critical look at the permitting requirements for new and modified sources to improve the overall rule. UDAQ distributed a draft version of R307-401 to stakeholders and has received a favorable response to this draft.

All of the draft rule changes can be found on UDAQ's web page.

## Schedule for Adopting PSD Reform Provisions: 8/5/05

| Milestone   | Completion Date  |
|---|--|
| Draft rules for stakeholder review                    | A draft of R307-405 was completed in May, 2005. However, this draft does not address the <i>State of New York vs. EPA</i> decision.  |
| Final Stakeholder meeting to discuss draft rules      | <b>One month</b> after EPA revises 40 CFR 52.21 to address the <i>State of New York vs. EPA</i> decision. We are assuming that EPA will revise 40 CFR 52.21 to remove the portions that have been vacated. We intend to wait for that action to occur so that we can incorporate the revised regulation by reference.) |
| Air Quality Board Approval for Comment                | <b>Two months</b> after EPA revises 40 CFR 52.21.  |
| Air Quality Board Final Adoption                      | <b>Six months</b> after EPA revises 40 CFR 52.21.  |
| UDAQ submits revised rules to EPA                     | <b>Seven months</b> after EPA revises 40 CFR 52.21   |
| SIP Revision due to incorporate NSR Reform Provisions | January 2, 2006  |

Note: Utah was on-track to complete rulemaking and submit a revised PSD rule to EPA by the January 2, 2006 deadline. The schedule has now been delayed because we are waiting for guidance from EPA about how to address the *State of New York vs. EPA* decision. UDAQ does not believe that we will be able to meet the January 2, 2005 deadline unless EPA provides clear direction and revises 40 CFR 52.21 by the end of August, 2005. However, we plan to move as expeditiously as possible once we receive guidance from EPA.

## Schedule for Adopting NAA NSR Reform Provisions: 8/5/05

Note: UDAQ is unable to move forward with revising R307-403 (*Permits: New and Modified Sources in Nonattainment Areas and Maintenance Areas*) until EPA finalizes changes to Appendix S and issues implementation guidance for the 8-hour ozone and PM<sub>2.5</sub> standards.

| Milestone  | Completion Date  |
|--|--|
| Draft NAA NSR rule revision for internal DAQ review (note: 40 CFR 51.165 has major gaps that are addressed by Appendix S – this portion of the rule has not yet been finalized by EPA) | Draft complete in June, 2004   |
| EPA Finalize Revisions to Appendix S and 40 CFR 52.24  | Unknown – Summer 2005?<br>Tied to Phase 2 of ozone implementation guidance and PM <sub>2.5</sub> implementation guidance |
| New draft NAA NSR rule revision for internal DAQ review that incorporates Appendix S changes and addresses 8-hour ozone and PM <sub>2.5</sub> .  | 3 months after EPA releases guidance   |
| Outreach/Review of Appendix S, 8-hour ozone, and PM <sub>2.5</sub> changes for external stakeholders   | 4 months after EPA releases guidance   |
| Draft rules for stakeholder review   | 5 months after EPA releases guidance   |
| State/Board Approval for Comment   | 7 months after EPA releases guidance   |
| Administrative: State Final Approval   | 11 months after EPA releases guidance  |
| UDAQ Submits Document to EPA   | 12 months after EPA releases guidance  |
| SIP Revision due to incorporate NSR Reform Provisions  | January 2, 2006  |

Note: At this point in time, UDAQ does not believe that we will be able to submit the NA NSR rule revisions to EPA by the January 2, 2006 deadline. The amount of work that will be required to adopt the NSR reform provisions into R307-403 will not be clear until we are able to review EPA's revisions to Appendix S.

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Director

ION M. HUNTSMAN, JR.  
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DAQC-1247-2005

**MEMORANDUM**

**TO:** Air Quality Board  
**FROM:** Richard W. Sprott, Executive Secretary  
**DATE:** August 9, 2005  
**SUBJECT:** Compliance Activities – July 2005

Annual Inspections Conducted:

A.....15  
SM.....6  
B.....12

Initial Compliance Inspections Conducted:

A.....0  
SM.....2  
B.....2

On-Site stack test audits conducted:.....1  
Stack test report reviews:.....9

On-site CEM audits conducted:.....5  
Emission reports reviewed:.....9

Oxy fuels inspections conducted:.....0

<sup>1</sup>Miscellaneous inspections conducted.....33





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*Director*

JON M. HUNTSMAN, JR.  
*Governor*

GARY HERBERT  
*Lieutenant Governor*

**MEMORANDUM**

TO: Utah Air Quality Board DAQH-0665-05

FROM: Richard W. Sprott, Executive Secretary

DATE: August 19, 2005

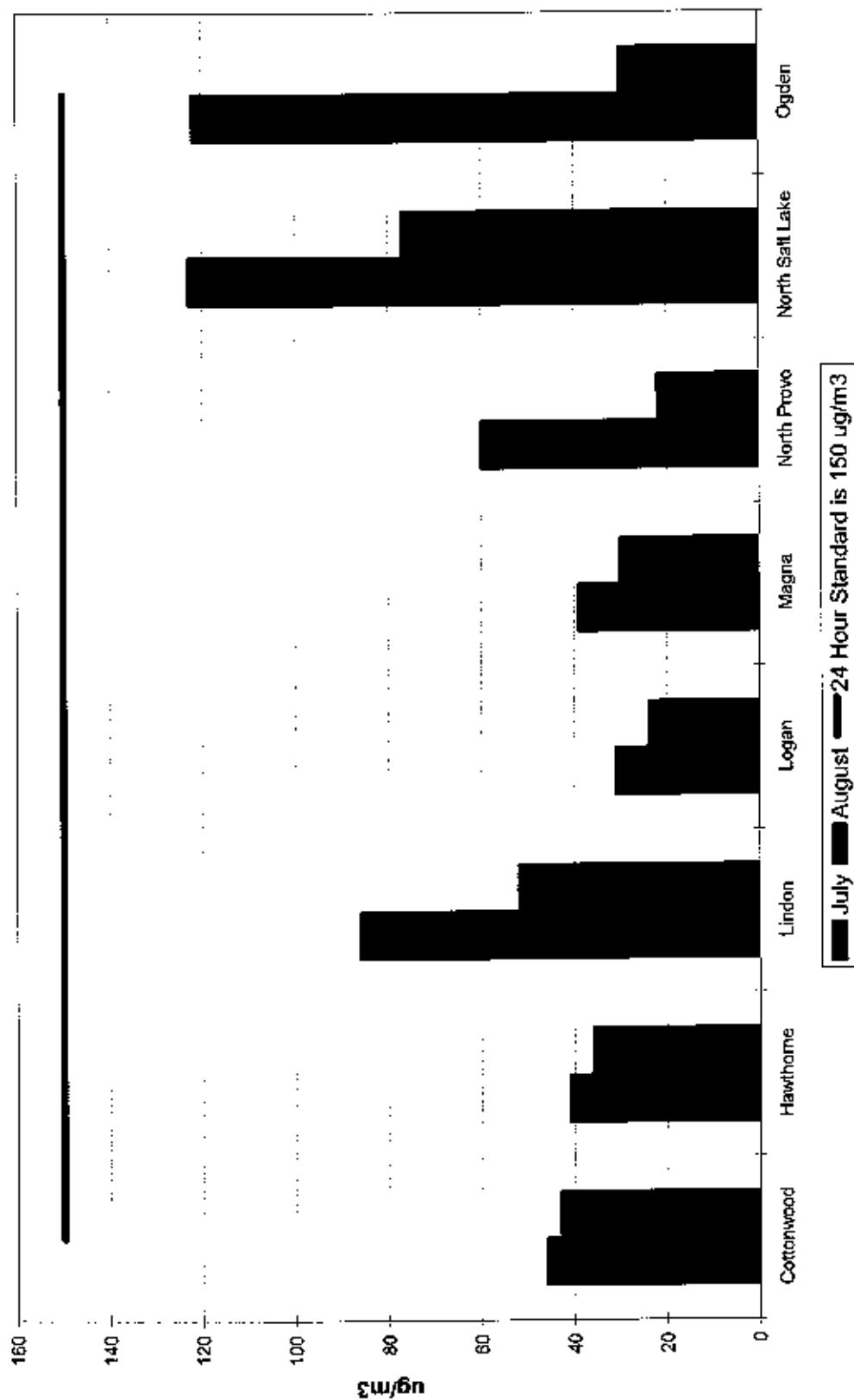
SUBJECT: Hazardous Air Pollutant Section Compliance Activities – July 2005

|   | <u>7/05</u> |
|---|-------------|
| Asbestos Demolition/Renovation Inspections                | 8           |
| Asbestos in School Inspections                            | 4           |
| MACT Compliance Inspections                               | 14          |
| Other NESHAP Inspections                                  | 0           |
| State Rules (Only) Inspections                            | 2           |
| Asbestos Notifications Accepted                           | 88          |
| Asbestos Phone Calls Answered                             | 456         |
| Asbestos Individuals Certifications: Approved/Disapproved | 34/0        |
| Company Certifications/Re-certifications                  | 0/0         |
| Alternate Asbestos Work Practices: Approved/Disapproved   | 4/0         |
| <br>Lead Based Paint (LBP) Inspections                    | <br>2       |
| LBP Notifications Approved                                | 3           |

Monitoring

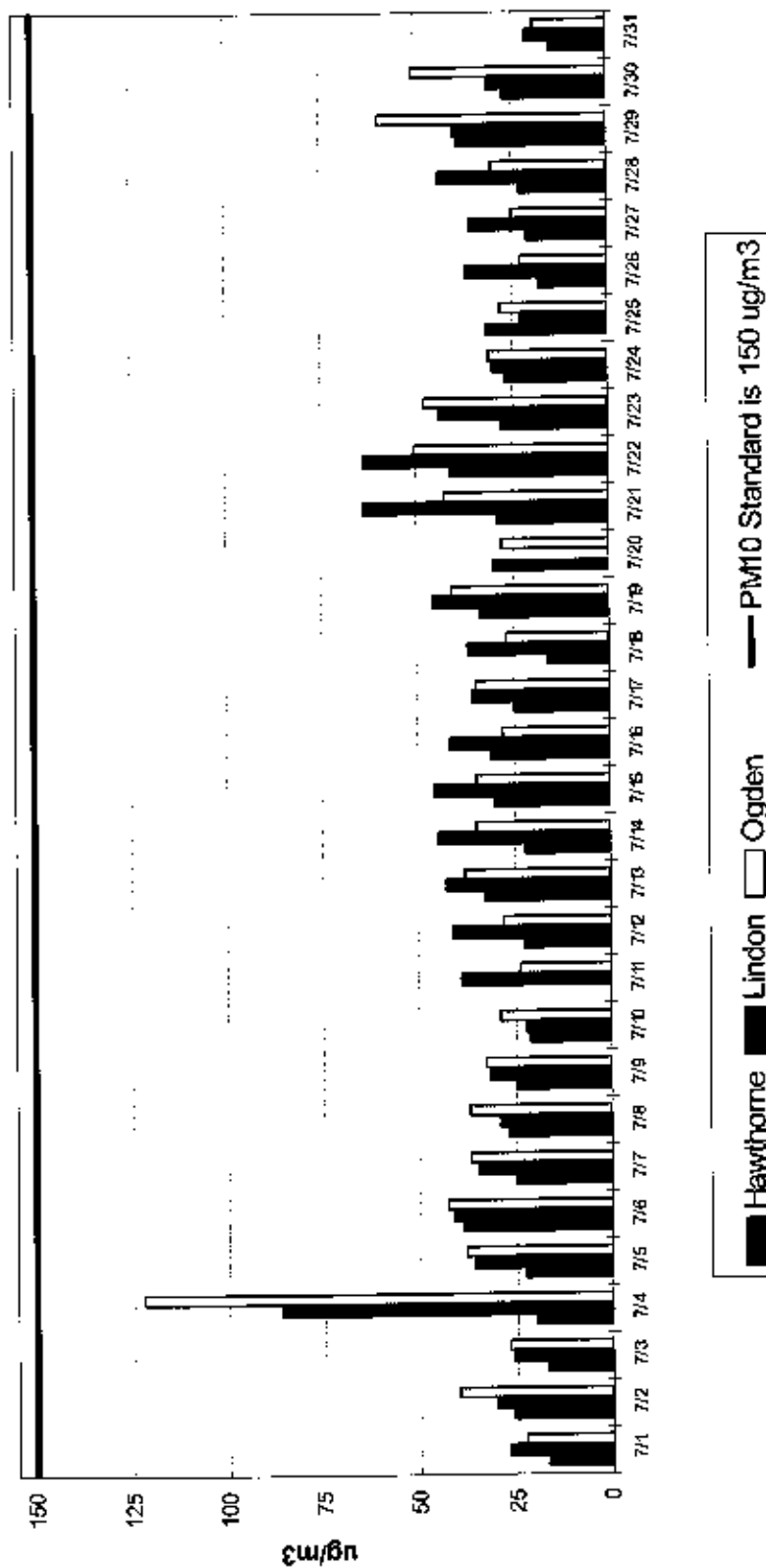
# Highest PM<sub>10</sub> Concentration for July-August 2005

PM<sub>10</sub> 24 Hour Standard is 150 ug/m<sup>3</sup>

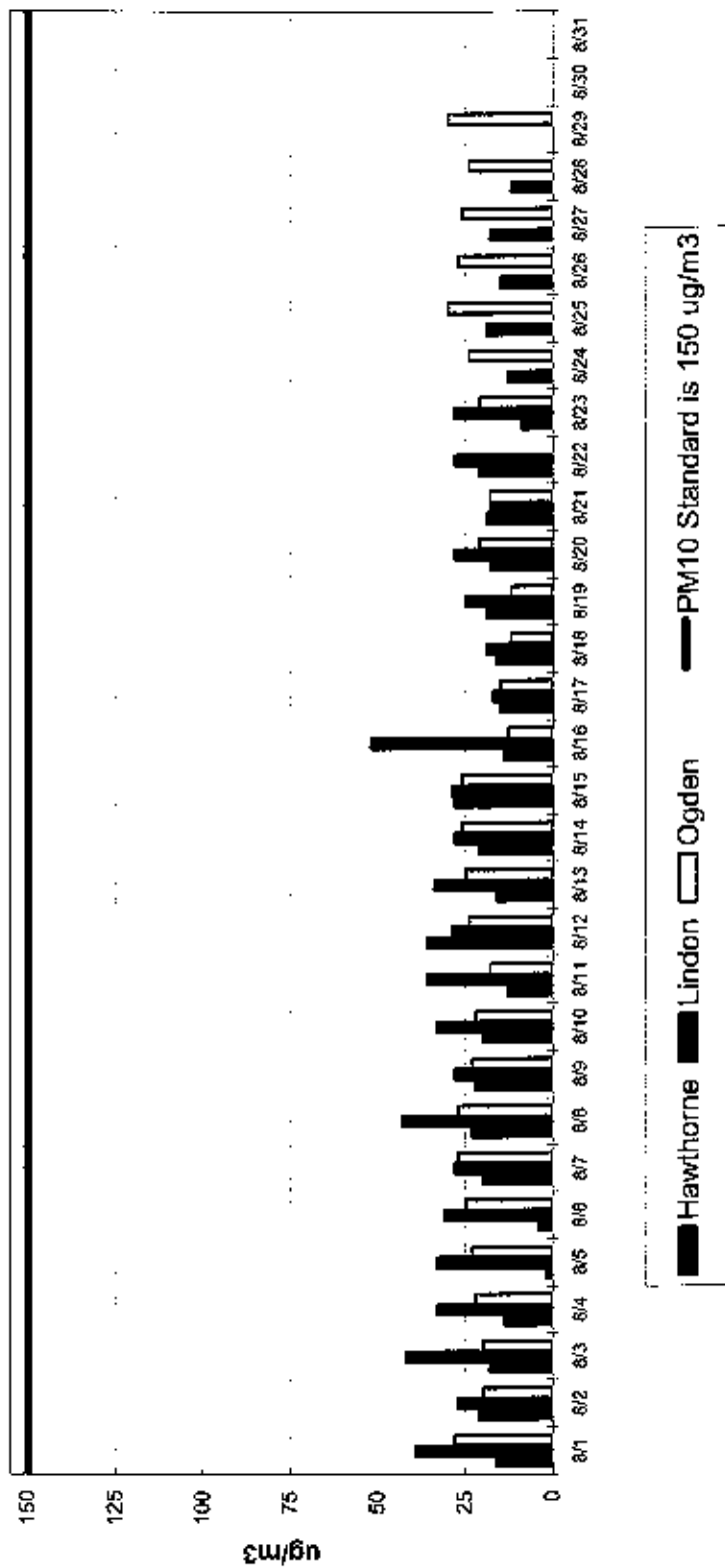


# PM<sub>10</sub> Filter at Hawthorne, Lindon, & Ogden

July 2005

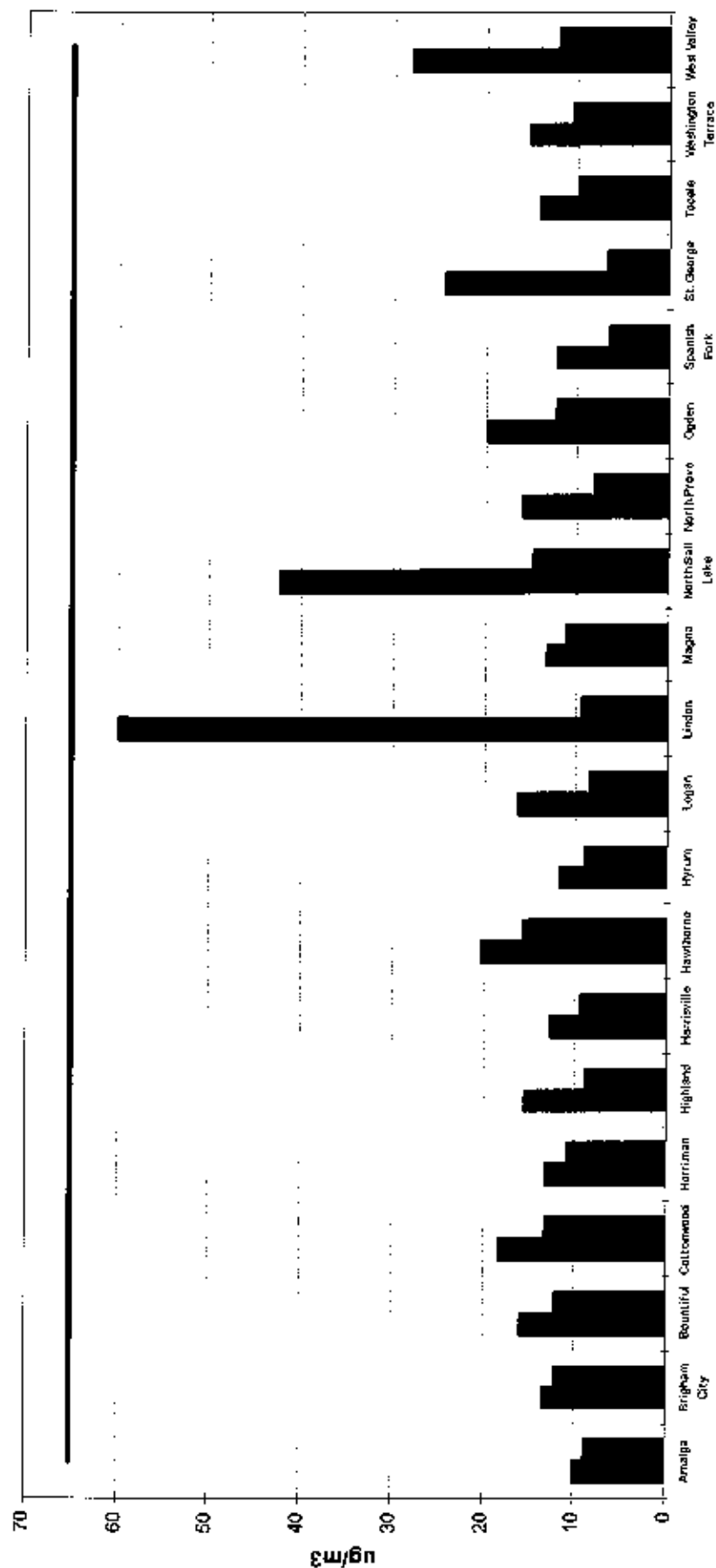


# PM<sub>10</sub> Filter at Hawthorne, Lindon, & Ogden August 2005



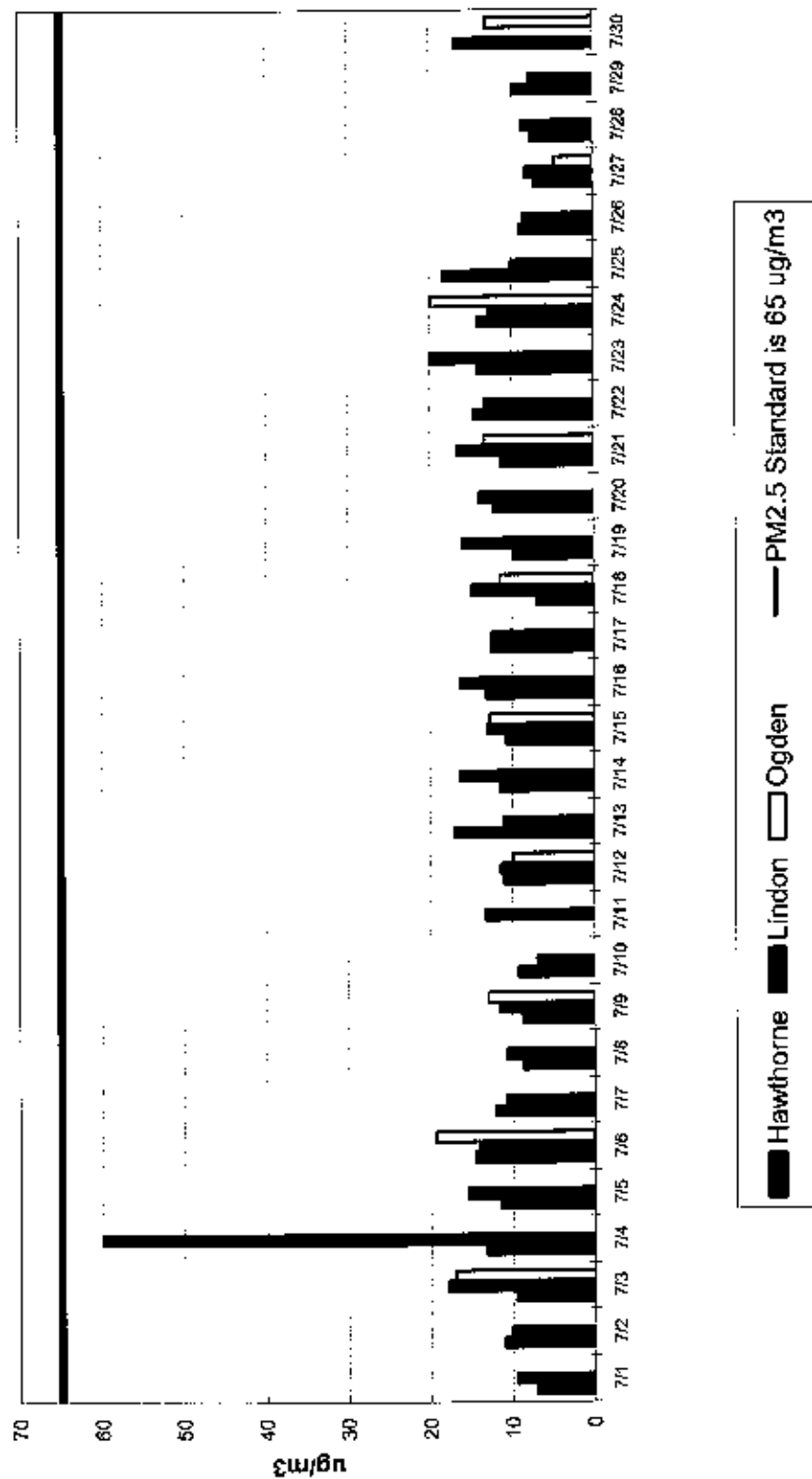
# Highest PM<sub>2.5</sub> Concentration for July-August 2005

PM<sub>2.5</sub> 24 Hour Standard is 65 ug/m<sup>3</sup>

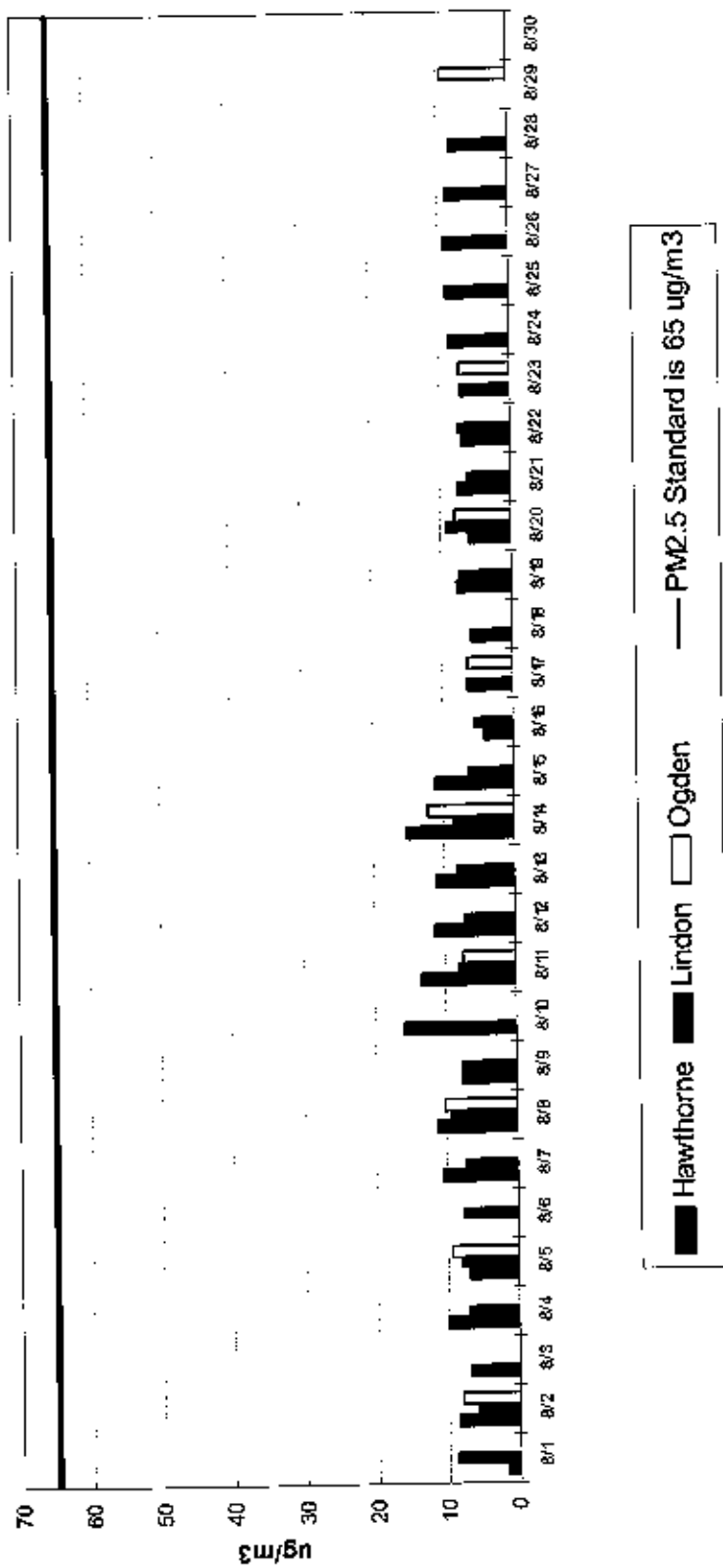


■ July ■ August — 24 Hour Standard is 65 ug/m<sup>3</sup>

# PM<sub>2.5</sub> Filter at Hawthorne, Lindon, & Ogden July 2005

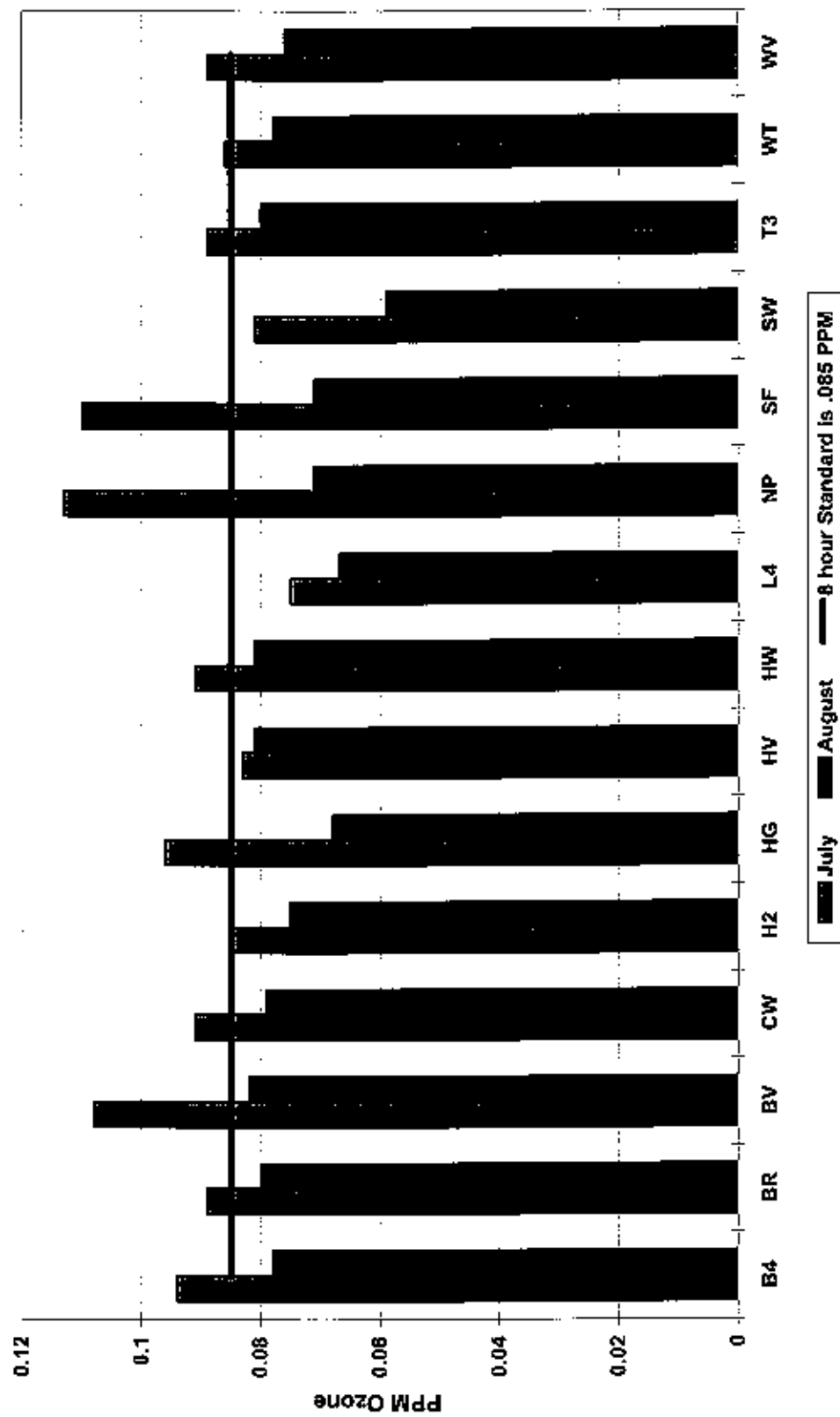


# PM<sub>2.5</sub> Filter at Hawthorne, Lindon, & Ogden August 2005





# 8 Hour Ozone Highest Daily Maximum Values July-August 2005



# UTAH STATE DIVISION OF AIR QUALITY

47mm Particulate PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter

2005 July

| Date          | CoronaWood | Hatchtown | Linden | Logan 4 | Magna(W) | Mowb | North | Northwest | NSL | NSL-X | Ogden2 |
|---------------|------------|-----------|--------|---------|----------|------|-------|-----------|-----|-------|--------|
| 07/01         |            | 17        | 27     |         |          |      |       |           | 46  |       | 29     |
| 07/02         |            | 26        | 30     |         |          |      |       |           | 34  |       | 40     |
| 07/03         | 27         | 17        | 26     | 14      |          |      | 22    | 22        | 20  | 19    | 27     |
| 07/04         |            | 20        | 36     |         |          |      |       |           |     |       | 122    |
| 07/05         |            | 23        | 26     |         |          |      |       |           | 68  |       | 38     |
| 07/06         | 32         | 39        | 41     | 11      | 37       |      | 32    |           | 72  |       | 43     |
| 07/07         |            | 25        | 35     |         |          |      |       |           | 67  |       | 37     |
| 07/08         |            | 27        | 29     |         |          |      |       |           | 36  |       | 37     |
| 07/09         | 30         | 25        | 32     | 30      | 30       |      | 24    |           | 33  | 35    | 33     |
| 07/10         |            | 21        | 22     |         |          |      |       |           | 30  |       | 29     |
| 07/11         |            |           | 29     |         |          |      |       |           | 33  |       | 24     |
| 07/12         | 21         | 23        | 41     | 25      | 26       |      | 29    |           | 67  |       | 26     |
| 07/13         |            | 33        | 43     |         |          |      |       |           | 47  |       | 38     |
| 07/14         |            | 22        | 45     |         |          |      |       |           | 55  |       | 35     |
| 07/15         |            | 30        | 46     | 30      | 34       |      | 35    | 35        | 56  | 56    | 35     |
| 07/16         |            | 31        | 42     |         |          |      |       |           | 45  |       | 28     |
| 07/17         |            | 25        | 36     |         |          |      |       |           | 36  |       | 35     |
| 07/18         | 32         | 16        | 37     | 29      | 26       |      | 25    |           | 40  |       |        |
| 07/19         |            | 34        | 46     |         |          |      |       |           |     |       |        |
| 07/20         |            | 30        |        |         |          |      |       |           | 52  |       |        |
| 07/21         | 46         | 29        |        | 31      | 39       |      | 60    | 47        | 123 | 126   |        |
| 07/22         |            | 41        |        |         |          |      |       |           | 72  |       |        |
| 07/23         |            | 28        |        |         |          |      |       |           | 37  |       |        |
| 07/24         | 41         | 27        |        | 20      |          |      |       |           | 29  |       |        |
| 07/25         |            | 32        |        |         |          |      |       |           | 27  |       |        |
| 07/26         |            | 18        |        |         |          |      |       |           |     |       | 23     |
| 07/27         | 39         | 21        |        | 21      | 25       |      | 24    | 29        |     |       | 25     |
| 07/28         |            | 23        |        |         |          |      |       |           |     |       | 30     |
| 07/29         |            | 39        |        |         |          |      |       |           |     |       | 60     |
| 07/30         | 41         | 27        |        | 24      | 34       |      | 13    |           |     |       | 51     |
| 07/31         |            | 15        |        |         |          |      |       |           |     |       | 19     |
| Arith Mean    | 35         | 26        | 39     | 23      | 32       |      | 30    | 33        | 49  | 59    | 37     |
| Max 24-hr Avg | 46         | 41        | 66     | 31      | 39       |      | 60    | 47        | 123 | 126   | 122    |
| Std Dev       | 8          | 7         | 14     | 7       | 5        |      | 12    | 10        | 22  | 47    | 21     |
| Days of Data  | 9          | 30        | 19     | 10      | 8        |      | 9     | 4         | 23  | 4     | 23     |
| Days > 50     |            |           |        |         |          |      |       |           |     |       |        |
| Yearly Avg    | 26         | 24        | 24     | 25      | 20       |      | 20    | 20        | 35  | 40    | 23     |

# UTAH STATE DIVISION OF AIR QUALITY

47mm Partisol: PM10 Concentration Adjusted to Sea Level (24-hr average) in Micrograms per Cubic Meter

2005 August

| Date  | Cottonwood | Hawthorn | Udlen | Legion 4 | Magna(W) | Medb | NProvo | NProvo-X | NSL | NSL-X | Ogden2 |
|-------|------------|----------|-------|----------|----------|------|--------|----------|-----|-------|--------|
| 08/01 |            | 16       | 39    |          |          |      |        |          | 30  |       |        |
| 08/02 | 43         | 31       | 27    | 14       | 30       |      | 21     | 22       | 37  | 41    |        |
| 08/03 |            | 18       | 42    |          |          |      |        |          | 35  |       |        |
| 08/04 |            | 14       | 33    |          |          |      |        |          | 46  |       |        |
| 08/05 | 36         | 2        | 33    | 23       | 22       |      | 21     |          | 36  |       |        |
| 08/06 |            | 4        | 31    |          |          |      |        |          | 24  |       |        |
| 08/07 |            | 20       | 28    |          |          |      |        |          | 26  |       |        |
| 08/08 | 32         | 23       | 43    | 24       | 22       |      | 22     | 23       | 32  | 32    |        |
| 08/09 |            | 22       | 28    |          |          |      |        |          | 25  |       |        |
| 08/10 |            | 20       |       |          |          |      |        |          | 39  |       | 22     |
| 08/11 | 24         | 13       |       |          |          |      |        |          |     |       | 18     |
| 08/12 |            | 36       |       |          |          |      |        |          |     |       | 24     |
| 08/13 |            | 16       |       |          |          |      |        |          |     |       | 25     |
| 08/14 |            | 21       |       |          |          |      |        |          |     |       | 26     |
| 08/15 |            |          |       |          |          |      |        |          |     |       |        |
| 08/16 |            |          |       |          |          |      |        |          |     |       |        |
| 08/17 |            |          |       |          |          |      |        |          |     |       |        |
| 08/18 |            |          |       |          |          |      |        |          |     |       |        |
| 08/19 |            |          |       |          |          |      |        |          |     |       |        |
| 08/20 |            |          |       |          |          |      |        |          |     |       |        |
| 08/21 |            |          |       |          |          |      |        |          |     |       |        |
| 08/22 |            |          |       |          |          |      |        |          |     |       |        |
| 08/23 |            |          |       |          |          |      |        |          |     |       |        |
| 08/24 |            |          |       |          |          |      |        |          |     |       |        |
| 08/25 |            |          |       |          |          |      |        |          |     |       |        |
| 08/26 |            |          |       |          |          |      |        |          |     |       |        |
| 08/27 |            |          |       |          |          |      |        |          |     |       |        |
| 08/28 |            |          |       |          |          |      |        |          |     |       |        |
| 08/29 |            |          |       |          |          |      |        |          |     |       |        |
| 08/30 |            |          |       |          |          |      |        |          |     |       |        |
| 08/31 |            |          |       |          |          |      |        |          |     |       |        |

|               |    |    |    |    |    |  |    |    |    |    |    |
|---------------|----|----|----|----|----|--|----|----|----|----|----|
| Arith Mean    | 34 | 18 | 34 | 20 | 25 |  | 21 | 22 | 33 | 37 | 23 |
| Max 24-hr Avg | 43 | 36 | 43 | 24 | 30 |  | 22 | 23 | 46 | 41 | 26 |
| Std. Dev      | 6  | 8  | 6  | 5  | 5  |  | 0  | 1  | 7  | 6  | 3  |
| Days of Data  | 4  | 14 | 9  | 3  | 3  |  | 3  | 3  | 10 | 2  | 5  |
| Days >150     |    |    |    |    |    |  |    |    |    |    |    |
| Yearly Avg    | 26 | 24 | 25 | 25 | 20 |  | 20 | 20 | 36 | 40 | 24 |

# UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter

2005 July

| Date  | AG   | BR   | BV   | CW   | HE   | HG   | HV   | HW   | HY   | L4   | Y4   | LN   | LX   | MG   | N2   | NP   | O2   | SF   | SW   | T3   | WT   | WX   | VW   | VX   |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 07/01 |      |      |      |      |      |      |      | 7.1  |      | 5.3  | 7.1  | 9.5  |      |      | 12.9 |      |      |      |      |      |      |      |      |      |
| 07/02 |      |      |      |      |      |      |      | 11.0 |      | 9.2  | 9.5  | 10.2 |      |      | 11.5 |      |      |      |      |      |      |      |      |      |
| 07/03 | 5.9  | 5.8  | 9.6  | 16.4 | 7.9  | 9.0  | 9.5  | 9.6  |      | 10.4 | 10.6 | 17.9 | 15.7 | 8.6  | 14.6 | 12.3 | 17.0 | 7.3  | 12.7 |      | 14.0 | 14.3 | 20.0 | 29.0 |
| 07/04 |      |      |      |      |      |      |      | 13.2 |      | 12.4 | 12.2 | 60.0 |      |      | 42.5 |      |      |      |      |      |      |      |      |      |
| 07/05 |      |      |      |      |      |      |      | 11.4 |      | 10.5 | 10.5 | 15.5 |      |      | 28.5 |      |      |      |      |      |      |      |      |      |
| 07/06 | 10.0 | 13.5 | 15.9 | 16.1 |      | 13.8 | 12.7 | 14.6 | 5.4  | 11.2 | 11.2 | 14.0 |      | 13.3 | 21.0 | 16.0 | 19.4 | 11.7 | 13.1 | 14.3 | 15.3 |      | 16.3 |      |
| 07/07 |      |      |      |      |      |      |      | 12.0 |      | 11.2 | 11.3 | 10.7 |      |      | 19.7 |      |      |      |      |      |      |      |      |      |
| 07/08 |      |      |      |      |      |      |      | 8.8  |      | 12.0 | 11.3 | 10.7 |      |      | 14.1 |      |      |      |      |      |      |      |      |      |
| 07/09 | 8.9  | 10.9 | 10.3 | 9.9  | 9.2  | 11.3 | 10.8 | 8.8  | 9.0  | 16.3 | 11.0 | 11.6 | 9.7  | 9.5  | 14.0 | 11.2 | 13.0 | 9.5  |      | 9.2  | 10.6 | 9.0  | 11.6 | 9.1  |
| 07/10 |      |      |      |      |      |      |      | 9.3  |      | 8.7  | 7.3  | 7.0  |      |      | 11.3 |      |      |      |      |      |      |      |      |      |
| 07/11 |      |      |      |      |      |      |      |      |      | 8.2  |      | 13.3 |      |      | 8.3  |      |      |      |      |      |      |      |      |      |
| 07/12 | 7.2  | 7.7  | 10.9 | 9.5  |      | 7.6  | 7.1  | 11.0 | 6.3  |      | 8.3  | 11.4 |      | 8.4  | 26.7 | 9.8  | 9.9  | 7.7  | 8.8  | 6.8  | 9.3  |      | 5.3  |      |
| 07/13 |      |      |      |      |      |      |      | 17.0 |      | 8.5  | 8.7  | 11.0 |      |      |      |      |      |      |      |      |      |      |      |      |
| 07/14 |      |      |      |      |      |      |      | 11.5 |      | 8.6  | 8.5  | 16.4 |      |      |      |      |      |      |      |      |      |      |      |      |
| 07/15 | 7.9  | 9.0  |      | 11.9 | 10.4 | 11.1 | 9.3  | 10.7 | 8.7  | 9.1  | 8.9  | 13.0 | 12.3 | 11.7 | 16.6 | 13.4 | 12.8 | 11.2 | 11.3 | 9.7  | 11.2 | 11.0 | 16.0 | 11.5 |
| 07/16 |      |      |      |      |      |      |      | 13.2 |      | 10.3 | 9.5  | 16.3 |      |      | 14.5 |      |      |      |      |      |      |      |      |      |
| 07/17 |      |      |      |      |      |      |      | 12.5 |      | 6.4  | 8.8  | 12.4 |      |      | 11.7 |      |      |      |      |      |      |      |      |      |
| 07/18 | 10.0 | 8.7  | 8.0  | 8.0  |      | 6.4  | 8.6  | 7.0  | 8.1  | 10.7 | 9.7  | 15.0 |      | 7.3  | 11.1 | 8.9  | 11.5 | 6.2  | 17.9 | 7.3  | 7.6  |      | 7.2  |      |
| 07/19 |      |      |      |      |      |      |      | 9.9  |      | 12.9 | 12.7 | 16.1 |      |      |      |      |      |      |      |      |      |      |      |      |
| 07/20 |      |      |      |      |      |      |      | 12.3 |      | 12.3 | 12.3 | 14.0 |      |      | 20.6 |      |      |      |      |      |      |      |      |      |
| 07/21 |      | 9.6  |      | 14.6 |      | 15.6 | 11.2 | 11.4 | 8.4  | 9.5  | 9.4  | 16.7 | 13.4 | 11.9 | 26.8 | 13.1 | 13.4 | 12.3 | 24.5 | 10.7 | 11.8 | 11.4 | 19.4 | 15.5 |
| 07/22 |      |      |      |      |      |      |      | 14.6 |      | 11.1 | 11.9 | 13.3 |      |      | 20.8 |      |      |      |      |      |      |      |      |      |
| 07/23 |      |      |      |      |      |      |      | 14.1 |      | 12.2 | 11.7 | 19.8 |      |      | 18.7 |      |      |      |      |      |      |      |      |      |
| 07/24 | 8.9  | 11.6 |      | 18.3 |      | 10.0 | 12.2 | 14.1 | 11.7 | 10.4 | 10.3 | 12.7 |      | 8.1  | 14.3 |      | 19.8 | 11.9 |      | 9.1  | 11.5 |      |      |      |
| 07/25 |      |      |      |      |      |      |      | 18.3 |      | 10.2 | 9.7  | 10.0 |      |      | 10.9 |      |      |      |      |      |      |      |      | 7.5  |
| 07/26 |      |      |      |      |      |      |      | 9.0  |      | 5.5  | 5.1  | 8.5  |      |      | 10.7 |      |      |      |      |      |      |      |      |      |
| 07/27 | 8.4  | 5.9  | 10.2 | 10.0 |      | 6.9  | 7.6  | 7.2  | 5.2  | 6.3  | 6.1  | 8.3  |      | 6.8  | 13.2 | 10.2 | 4.7  | 7.0  |      | 3.9  | 8.8  | 7.6  |      |      |
| 07/28 |      |      |      |      |      |      |      | 7.7  |      | 6.8  | 6.4  | 8.7  |      |      | 12.3 |      |      |      |      |      |      |      |      |      |
| 07/29 |      |      |      |      |      |      |      | 9.9  |      | 7.4  |      | 7.8  |      |      |      |      |      |      |      |      |      |      |      |      |
| 07/30 | 7.3  | 10.5 | 11.3 | 10.5 |      | 9.7  | 12.0 | 16.9 | 8.2  | 7.2  | 7.4  | 7.8  |      | 10.0 | 13.7 | 6.7  | 13.2 | 5.4  |      | 7.7  | 12.6 | 10.5 | 10.0 |      |
| 07/31 |      |      |      |      |      |      |      |      |      | 5.7  | 5.9  | 7.2  |      |      | 13.8 |      |      |      |      |      |      |      |      |      |

|               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Actl Mean     | 8.1  | 9.4  | 10.9 | 12.5 | 9.2  | 10.1 | 10.1 | 11.5 | 8.4  | 9.6  | 9.4  | 13.8 | 12.8 | 9.6  | 16.9 | 11.3 | 13.5 | 9.0  | 14.7 | 8.7  | 11.3 | 10.6 | 13.9 | 15.0 |
| Max 24-hr Avg | 10.0 | 13.5 | 15.9 | 18.3 | 16.4 | 15.6 | 12.7 | 18.3 | 11.7 | 16.3 | 13.3 | 60.0 | 15.7 | 13.3 | 42.5 | 16.0 | 19.4 | 12.3 | 24.5 | 14.3 | 15.3 | 14.3 | 20.0 | 29.0 |
| Std Dev       | 1.4  | 2.3  | 2.5  | 3.5  | 1.2  | 2.9  | 1.0  | 3.0  | 1.8  | 2.6  | 2.2  | 9.2  | 2.5  | 2.1  | 7.4  | 2.8  | 4.5  | 2.9  | 2.4  | 5.7  | 2.4  | 2.6  | 6.7  | 8.2  |
| Days Data     | 10   | 10   | 7    | 10   | 3    | 10   | 10   | 29   | 9    | 30   | 30   | 31   | 4    | 10   | 27   | 9    | 10   | 10   | 6.0  | 9    | 10   | 5    | 9    | 5    |
| Yearly Mean   | 14.1 | 9.1  | 11.0 | 12.7 | 8.7  | 8.9  | 9.8  | 12.4 | 11.4 | 14.7 | 14.0 | 11.0 | 10.6 | 10.1 | 14.3 | 10.8 | 11.9 | 8.6  | 7.5  | 8.7  | 10.0 | 10.3 | 12.7 | 11.4 |

# UTAH STATE DIVISION OF AIR QUALITY

PM2.5 Actual Concentration (24-hr average) in Micrograms per Cubic Meter

2005 August

| Date  | AG  | BR  | BV  | CV   | EE   | HG  | HV | HW   | HY  | LI  | LA  | LN  | LX  | MG   | N2   | NP  | O2   | SF | SV  | T3  | WT   | WX  | VV  | VX  |
|-------|-----|-----|-----|------|------|-----|----|------|-----|-----|-----|-----|-----|------|------|-----|------|----|-----|-----|------|-----|-----|-----|
| 08/01 |     |     |     |      |      |     |    | 1.7  | 6.7 |     | 6.9 |     |     | 6.8  |      |     |      |    |     |     |      |     |     |     |
| 08/02 | 5.7 | 5.2 | 9.2 | 6.7  |      | 7.0 |    | 8.6  | 4.9 | 5.6 | 5.6 | 5.8 | 6.2 | 7.4  | 9.6  | 6.4 | 8.1  |    | 6.9 | 5.0 | 5.8  | 5.0 | 6.3 |     |
| 08/03 |     |     |     |      |      |     |    | 6.8  | 5.0 | 4.6 |     |     |     | 12.1 |      |     |      |    |     |     |      |     |     |     |
| 08/04 |     |     |     |      |      |     |    | 10.0 | 5.6 | 5.5 | 6.9 |     |     | 12.3 |      |     |      |    |     |     |      |     |     |     |
| 08/05 | 5.7 | 6.1 | 8.1 | 7.9  |      | 6.5 |    | 7.0  | 5.4 | 7.4 | 7.7 | 8.0 |     | 7.3  | 12.2 | 7.5 | 9.2  |    | 5.0 | 6.1 | 6.3  |     | 7.7 | 8.2 |
| 08/06 |     |     |     |      |      |     |    |      |     |     | 8.8 | 7.7 |     | 9.5  |      |     |      |    |     |     |      |     |     |     |
| 08/07 |     |     |     |      |      |     |    | 10.5 |     |     | 8.3 | 7.2 |     | 11.1 |      |     |      |    |     |     |      |     |     |     |
| 08/08 |     |     | 9.2 | 8.9  |      | 8.9 |    | 11.3 | 7.8 |     |     | 9.5 |     | 6.3  | 10.6 |     | 10.1 |    |     | 7.1 | 7.4  | 7.6 | 7.5 | 7.8 |
| 08/09 |     |     |     |      |      |     |    | 7.8  |     |     |     | 7.8 |     | 9.2  |      |     |      |    |     |     |      |     |     |     |
| 08/10 |     |     |     |      |      |     |    | 15.8 |     |     |     |     |     | 10.2 |      |     |      |    |     |     |      |     |     |     |
| 08/11 |     |     |     | 4.9  | 6.0  |     |    | 13.2 |     |     |     |     |     | 5.1  | 10.6 |     | 7.5  |    |     | 3.9 |      |     |     |     |
| 08/12 |     |     |     |      |      |     |    | 11.3 |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/13 |     |     |     |      |      |     |    | 11.2 |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/14 |     |     |     | 13.2 | 10.9 |     |    | 15.2 |     |     |     |     |     | 10.9 | 14.8 |     | 12.3 |    |     | 9.8 | 10.7 | 9.5 |     |     |
| 08/15 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/16 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/17 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/18 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/19 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/20 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/21 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/22 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/23 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/24 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/25 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/26 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/27 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/28 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/29 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/30 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |
| 08/31 |     |     |     |      |      |     |    |      |     |     |     |     |     |      |      |     |      |    |     |     |      |     |     |     |

|               |      |     |      |      |      |     |     |      |      |      |      |      |      |      |      |      |      |     |     |     |      |      |      |      |
|---------------|------|-----|------|------|------|-----|-----|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------|------|
| Arith Mean    | 6.2  | 5.7 | 8.5  | 8.3  | 8.5  | 7.6 |     | 10.0 | 6.0  | 6.1  | 5.7  | 7.7  | 6.2  | 7.4  | 10.8 | 7.2  | 9.5  |     | 5.9 | 6.4 | 7.5  | 7.7  | 7.1  | 8.0  |
| Max 24-hr Avg | 6.7  | 6.1 | 9.2  | 13.2 | 10.9 | 8.9 |     | 15.8 | 7.8  | 7.4  | 8.8  | 9.5  | 6.2  | 10.9 | 14.9 | 7.9  | 12.3 |     | 6.9 | 9.8 | 10.7 | 9.5  | 7.7  | 8.2  |
| StdDev        | 0.7  | 0.6 | 0.6  | 3.1  | 3.5  | 1.2 |     | 3.8  | 1.5  | 1.0  | 1.7  | 1.2  |      | 2.2  | 1.8  | 1.1  | 1.9  | 2.3 | 2.3 | 1.3 | 2.2  | 1.7  | 0.7  | 0.3  |
| Days Data     | 2    | 2   | 3    | 5    | 2    | 3   |     | 13   | 1    | 5    | 6    | 8    | 1    | 5    | 12   | 2    | 5    |     | 2.0 | 5   | 4    | 3    | 3    | 2    |
| Yearly Mean   | 15.5 | 9.0 | 10.9 | 12.4 | 8.7  | 8.9 | 9.8 | 12.4 | 11.5 | 14.5 | 14.0 | 10.9 | 10.5 | 10.0 | 14.2 | 10.8 | 11.7 | 8.6 | 7.4 | 7.9 | 9.9  | 10.1 | 12.6 | 11.4 |